DOCUMENT RESUME

ED 390 729 SO 025 430

AUTHOR Peterson, Richard A.; Sherkat, Darren E.
TITLE Age Factors in Arts Participation: 1982-1992.
INSTITUTION Vanderbilt Univ., Nashville, Tenn.
SPONS AGENCY National Endowment for the Arts, Washington, D.C.
PUB DATE 20 Jan 95
CONTRACT RFQ-93-17
NOTE 121p.
AVAILABLE FROM Research Division, Room 617, National Endowment for the Arts, 1100 Pennsylvania Avenue, N.W., Washington, DC 20506-0001.
PUB TYPE Reports - Research/Technical (143)

EDRS PRICE MF01/PC05 Plus Postage.
DESCRIPTORS *Audience Analysis; *Audience Participation; *Audiences; Cohort Analysis; Demography; *Fine Arts; Jazz; Mass Media; Music; Opera; *Popular Culture; Radio; Social Science Research; Television Viewing; Theater Arts; Trend Analysis; Visual Arts
IDENTIFIERS *Arts Participation

ABSTRACT

The changing age composition of audiences gives an indication of the demand for art forms now and in years to come. This survey report seeks to determine the make-up of audience participants by age and preference of art form. Demographic variables considered include: education; income; gender; race; urban place of residence; marital status; and presence of children under 12 in the home. Influences of aging, cohort, and period relationships are also distinguished. The seven demographic control variables clearly change most of the relationships examined. These findings are described and discussed in the first seven chapters of the report. The final chapter turns the focus from arts participation to tastes for art music and indicates a tendency toward omnivorous appreciation for art music and popular music among all groups. This suggests that a broader aesthetic experience encompassing both high brow and low brow forms might be advantageous. Tables showing data are included. Contains 14 references. (NP)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

SO

ED 390 729

AGE FACTORS IN ARTS PARTICIPATION: 1982-1992

Final Report

National Endowment for the Arts RFQ 93-17

Richard A. Peterson and Darren E. Sherkat

Demographic Data Consultants
and
Vanderbilt University
Nashville, Tennessee

January 20, 1995

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY
Thomas Kladdaw

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

X This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

SO 025-430

BEST COPY AVAILABLE

AGE FACTORS IN ARTS PARTICIPATION: 1982-1992

Table of Contents
January 21, 1995

Executive Summary		5 pages
Chapter 1.	Introduction	12 pages
Chapter 2.	Period Effects on Arts Participation	10 pages
Chapter 3.	Age Differences in Arts Participation	10 pages
Chapter 4.	Comparisons of Arts Participation Across Cohorts	12 pages
Chapter 5.	The Arts Participation of Cohorts Over Time	12 pages
Chapter 6.	Cohort Arts Consumption via the Media	18 pages
Chapter 7.	Effects of Life Course Experiences on Arts Participation	8 pages
Chapter 8.	Cohort Differences and Shifts in Highbrow and Omnivorous Tastes	10 pages
References		2 pages

EXECUTIVE SUMMARY

Richard A. Peterson and Darren E. Sherkat *January 20, 1995*

Artists, arts administrators, and arts policy-makers need to pay close attention to the changing age composition of audiences because it gives an indication of the demand for the art forms now and in the years to come. The figures reported in ***Arts Participation in America: 1982-1992*** suggest that the audiences for some art forms are "greying." This is most notable for classical music and musicals according to that report. At the same time ballet and jazz are reported to be attracting a younger audience in 1992 than they did in 1982.

This report seeks to find whether these and the many other apparent differences are due to age dynamics, or if they are due to demographic and life course factors that are often loosely related to age. Examples of life course factors include having young children at home and the death of a spouse. To do eliminate the effects of demographic and life course factors we control for seven variables: education, income, gender, race, urban place of residence, marital status, and the presence of children under twelve in the home. Further, the study distinguishes the influences of the three commonly identified components of age: the first is aging -- differences in arts attendance due to changes taking place over the life course; the second is cohort -- patterns of arts attendance that characterize a particular age group such as "babyboomers" as it passes through the life course; and third is period -- the distinctive influence on arts attendance of the economic and social conditions during each of the two years in which the survey data was collected.

Summary of the Results

The seven demographic control variables clearly change most of the relationships examined. Some apparent age differences evaporate, and others emerge when the controls are introduced. The low rates of attendance of the elderly at live performances, for example, are greatly increased when the demographic factors are introduced, showing that the elderly's withdrawal from active participation is not primarily a result of aging per se but is due to their generally lower levels of education. Likewise the relatively high rates of participation of those born since World War Two evaporate when the controls are taken into account since the higher unadjusted rates are influenced by these cohorts' relatively high education and income. Because the controls proved of such importance they will be the focus of Chapter 7, and only the results with controls will be reported here in the Executive Summary.

Period Effects Comparing 1992 with 1982 figures, there is no general increase or decrease that would indicate an overall social, political, or economic influence during the specific years in which the surveys were fielded. Nonetheless there are discipline-specific period shifts down from 1982 to 1992, most notably in the rates of attendance at classical music concerts and musicals. For details see Chapter 2. These period effects were sufficiently large that we controlled for them as well in the chapters on Aging and Cohorts.

Age Differences Those over 77 years of age participate less in all the arts, even after all the controls have been introduced. For the other age groups, the arts disciplines fall into four patterns. For classical music, opera, musicals, and stage plays, attendance is consistently high for those 47 to 76 years of age and then trails off consistently in each younger age group.

The rates of attendance at ballet and museums is equally high for all age groups except the youngest, which is significantly lower. Novel reading is similar except that it does not fall off for the youngest group. Jazz concert attendance is unique in showing a consistent rise in attendance from the oldest right through to the youngest age group. For further details, see Chapter 3.

Comparisons Between Cohorts After all the controls have been introduced, classical music, opera, ballet, and theatrical play attendance is equally high for all pre-World War Two cohorts and then drops steadily for each subsequent cohort. Except for the lower activity of the oldest cohort, art museum attendance and novel reading is about the same for all cohorts. The pattern for jazz is again unique; the oldest cohort has the lowest rate of attendance, the other pre- World War Two cohorts have the same higher attendance, the rate continues to rise through the two baby boomer cohorts and then falls off somewhat for the baby busters (those born since 1966). For further details, see Chapter 4.

Comparisons of Cohorts Over Time The 1992 arts participation of cohorts is generally comparable to their participation a decade earlier, except for the oldest cohort whose rate is clearly lower. How much a specific cohort changed in its participation in the arts varies according to the specific discipline under review. For all cohorts it is true that their 1992 attendance at classical music concerts, musicals, ballet, and theatrical plays is lower than their comparable age-cohort's attendance was in 1982, while the 1992 cohorts maintain the same level of opera-goers as cohorts who were in their current age-range in 1982. In contrast, each cohort surveyed in 1992 shows higher

rates of attendance at museums and jazz performances than did the cohort that was in its current age-range when surveyed in 1982.

For further details, see Chapter 5.

Rates of Arts Participation via the Media Arts consumption via TV and video showed dramatic positive period effects for every discipline and virtually every age group, as the results summarized below indicate:

- -

Arts Participation in the Media by Cohort and Survey Year

(1992 results compared to those of 1992)

	Medium	
Art form	Television	Radio and Recordings
classical music	pre-boomers up late boomers down	unchanged for older cohorts up for younger cohorts
opera	down for all ages	radio down for older cohorts both stable for younger cohorts
ballet	up for all ages	
musicals/plays	up for all ages	
visual arts	up for all ages	
jazz	down for all ages	

For further details, see Chapter 6.

- -

Demographic and Life-course Factors that Affect Arts Participation Being well educated, relatively well-to-do, and female significantly increases the probability of attending performances of classical music, opera, musicals and plays for all age groups. For those under 46, being married or divorced and having children at home have a strong negative impact on participation. For the middle aged, these factors do not impinge on attendance. Surprisingly,

widowhood does not lower participation among the elderly. For further details, see Chapter 7.

The Changing Tastes of Arts Participants Highbrows, those who say they like both classical music and opera, are found most frequently among those born before 1935. At the same time, highbrows of all ages - especially those born since 1956 tend to like many more kinds of music than do others of the same age. This finding sharply contradicts the idea that all highbrows are elitist and puts into question arts advocacy that accents its exclusiveness. For further details, see Chapter 8.

Finally, the benefits of comparative analysis will be multiplied many fold in a decade when it will be possible to compare the dynamics of audience arts participation over a twenty year period. Then it will be possible to make many more accurate projections for age groups and cohorts.

CHAPTER 1 January 20, 1995

INTRODUCTION

Why should artists, arts managers, and arts administrators be interested in the age of their audiences?

There are a number of good reasons. Older audiences are said to have different preferences from younger ones. As importantly, over time a generation of audience members age, and as their numbers thin out, will the rising generation of adults show the same patterns of arts participation as their elders? This issue has been contested because, on the one hand, better educated people have tended to go to the arts more often, and each succeeding generation -- in this century at least -- has been better educated than prior ones. On the other hand, there is evidence that well educated "baby boomers" - those born in the two decades following World War II - do not participate as often as the well educated among their elders, leading to what has been termed the "greying of the audience" (Balfe 1989; Peterson 1990, 1992). Concern over baby boomers' apparently lower commitment to the arts was brought directly to the attention of the National Council for the Arts in November, 1992 by John Mather (1993).

Because the National Endowment for the Arts has made Surveys of Public Participation in the Arts in 1982 and 1992, it is possible to address these and related questions concerning the age of arts audiences. This introductory chapter sets the groundwork for the substantive chapters that follow. It discusses the basis for the specific way of composing age groups, differentiates the three components of what is commonly meant by "age" - aging, cohort, and period - discusses the use of demographic controls to more clearly see the effects of age per se on arts participation, and finally it briefly notes the topics of the chapters that follow.

Creating Age Groups

In considering age, the first thing we have done is to group together persons of about the same age. One conventional way of forming people into age groups is to put those who happen to be 18-24 at the time of the survey into one group and to form decade-length age groups 25-34, 35-44 etc. for the older age groups. This is the pattern followed in the National Endowment for the Arts' monograph Arts Participation in America: 1982-1992 (Robinson 1993), for example. This basis of division is excellent for many purposes, but it does not satisfy our need in this monograph to identify and isolate baby boomers and other socially meaningful groups of persons who have many common experiences, having grown up in a definable time in American history. Locating such age cohorts is important because researchers have found that going through roughly the same socializing experiences leads age groups to make distinctive social, cultural, and political choices throughout the rest of their lives. The shared experiences of an age group are considered to be of such potential importance for arts participation that the monograph by Judith Balfe and Rolf Meyersohn can be devoted entirely to baby boomers.

The "baby boom" began in 1946 with the end of World War II, the return of the military forces from overseas, the reduction of opportunity for wage work for young women, and the general wave of optimism of the time. The end of the boom is less clear cut, but the decline in the high birthrate began about 1960 with the widespread availability of birth control pills. For this reason the end of the boom is usually set as 1965, when birth rates reached pre-war levels.

The conditions for children born in this twenty-year period were not, however, identical. Those born in the first decade of the boom often grew up

in raw suburban tracts, experienced overcrowded schools and institutions not designed to cope with this huge number of affluent youth. With millions going to college, and others siphoned off to the military services by the Viet Nam war, there were seemingly unlimited job opportunities. Those born in the second decade of the boom, in contrast, were raised in a more settled suburban environment with new schools of ample size. In their teen years they inherited from the early baby boomers a teen culture charged by "sex, drugs and rock'n roll." In their twenties they found that it was not easy to find meaningful employment because economic growth was slowing and because the huge number of older boomers just ahead of them had already taken the available good jobs. Since the experience of early and late boomers has been so different, it makes good to separate them into two age groups each a decade in length.

Having defined the two boomer groups, we have created decade-long age groups before and after the boomers. These are enumerated in Figure 1.1. The names given to each age group is only indicative of a commonly shared experience and, as with baby boomers, should not be interpreted as the only common characteristic of the time in which they were born. What is more, the designations do not always neatly cover the decade.

Figure 1.1 about here

The years before World War I are often called the Progressive era because there were widespread working class and middle class movements focused on checking the power that big business had attained in the final decades of the nineteenth century. Public support for artistic expression was not a feature of this era, and arts policy was primarily dictated by the reformist

progressives who helped to enact numerous laws and regulations to censor and control artistic expression in an effort to protect workers, women, and children from the apparent excesses of "European" culture.

The "Roaring Twenties" actually had their origins in 1916 with the upwelling of naive optimism that accompanied the outbreak of the "Great Crusade" of World War One, to "make the world safe for democracy." The ensuing disenchantment that resulted from the disastrous outcome of that war led directly to the narcissistic excesses of the 20s in which those born after 1916 experienced their youth. Young adults in the 1930s were profoundly affected by the Great Depression, which began for most following the Stock Market Crash of 1929. Finally those of the 1936-1945 period, if not born during World War II, had their early experiences shaped by it.

We have already described the early and late baby boomer of the 1946-1965 period and the differences between them. Their post-65 successors are the baby busters, born in a decade when birth rates dropped precipitously as effective birth controls and the norm of a small family spread to most of the population and many women deferred having children for a decade or more. Baby busters were born into a world disillusioned by the debacle of Viet Nam and bereft of the national optimism of the prior two decades. They went on to get college degrees in unprecedented numbers but, in a decelerating economy, found few good jobs. Thus in a economic sense as well their early experiences were a period of "bust" relative to the boom of the decades preceding.

Differentiating Aging, Cohort, and Period

AGING The age of audiences participating in the arts can be viewed in three distinct ways (Robinson 1982). The first is called *aging*. Do young

people always tend to have a different pattern of arts participation from the middle-aged, who, in turn, have a different pattern from their elders? Thus, when asking about aging, the question is how does arts participation at any point in time vary across the age groups?

As can be seen from Table 1.1, the proportion reporting attendance at live classical music events is higher for all age groups (represented by the left-hand column of figures) than is attendance at ballet (represented by the right-hand column of figures) which in turn is slightly higher than the percent attending opera (represented by the central column of figures).

Table 1.1 about here

Note that attendance rises with age and for both classical music and opera reaches a peak among those 47 to 56 years old, while attendance at ballet reaches a peak a decade earlier and begins to fall beginning with those 47 to 56. Note finally that for all three art forms attendance falls precipitously among those in the oldest age group. Taking these results together, one would expect to see more young people at a ballet concert and the most older people at an opera concert. One might also be tempted to surmise that, given the aging opera audience, that the prospects for the future are not nearly so bright as for ballet with its much younger audience.

Before making such conclusions, however, a number of considerations need to be taken into account. To begin with, it may be that ballet has always been a younger person's form, while most people come to appreciate opera only in their later years. We can't say about "always" but we do have data from a decade earlier. Data reported in Chapter 2 show the 1992 attendance figures separately from those for 1982. These data show that the audience for symphony was younger in 1982, but that the audience for ballet was quite a bit

older. While these findings suggesting that between 1982 and 1992 ballet companies have somehow attracted a younger audience, and that the audience for symphony and opera is greying, the observed changes may not be due to differences in age per se, but they may be caused by a host of other factors of the sort discussed in the next section of this chapter. Suffice it here to suggest the importance of aging on live arts attendance.

COHORT The second measure of age is generally called *cohort*. Cohort analysis involves following one age group - a cohort - over time and comparing its arts participation with cohorts before and after it. This idea that cohorts might differ systematically has already been introduced in our discussion of baby boomers and the other groups identified in Figure 1.1 above. We can illustrate cohort differences with the data for symphony attendance represented in Table 1.2.

Table 1.2 about here

In each line of Table 1.2 we can see the difference between the 1982 and the 1992 rates of attendance for each of the six birth cohorts surveyed in both years. The youngest of the Pre-1916 cohort were at least 67 in 1982 and 77 in 1992, so it is not surprising that their attendance dropped sharply. In contrast the middle four cohorts maintained a remarkably consistent rate of concert attendance over the decade. The older baby boomers, those born between 1946 and 1955, did not markedly increase their attendance as they matured. And the attendance of the younger baby boomers, those born between 1956 and 1965, actually went down. As we will see in Chapter 7, growing family responsibilities clearly affected the latters' attendance.

PERIOD The final way of looking at age, is by taking into account the time that the data is collected. This is called *period*. It may well be that for most arts forms, if not all, rates of participation are higher at one point in time than at another. This may be because one survey year enjoys greater affluence and freedom from political strife, while another survey is fielded in a year of recession or political turmoil. Period effects may also influence a specific art form, as when a spectacular set of events draws an unusual amount of popular attention to the art form at precisely the time the survey is being taken. In Chapter 2 which focuses on period effects, we suggest, for example, that the singular success of "Cats" may partly account for the popularity of musicals in 1982. Likewise, period effects may affect some age groups but not others. For example, the counter-culture of the late 1960s profoundly affected those under thirty at the time but had little effect on those over forty. Looking again at Table 1.2, the data suggest that rates of participation seem to have increased from 1982 to 1992, but numerous other factors need to be taken into accountbefore accepting this finding. We now turn to those factors.

Isolating Age Effects with Demographic and Life Course Controls

So far we have tacitly assumed that age is the only variable that affects differences in arts participation, but we know better than that. Educated people tend to attend the arts more often than others. So do the well-to-do and those living in the larger cities, women, and whites. The effects of all these influences can be seen in Arts Participation in America (Robinson 1993). What is relevant for our discussion of age is that each of these variables shows an interaction with age. Thus, for example, younger age

groups tend to be better educated, women tend to live longer than men, younger people tend to move to cities rich in arts opportunities while older people move out of large cities. Thus in comparing age groups we need to take into account these demographic factors that may influence rates of arts participation.

There are two other variables having to do with the respondent's place in a family, which are not discussed in Arts Participation in America, that also need to be considered in their effect on arts participation. The first of these is marital status. Those never married have higher rates of arts participation than do those ever married (those currently married, divorced, or widowed). In addition, those with children under the age of 12 at home are severely limited in their ability to go to live arts presentations. Collectively such factors are conventionally called "life course" variables.

The purpose of statistically taking into account the influence of the demographic and life course variables is to find the degree to which age actually determines arts participation. In order to see the effects of age per se on arts participation, the influences of these seven demographic and life course variables are introduced in the chapters that follow.

To illustrate the impact of these controls, unadjusted and adjusted participation rates for classical music are shown in Table 1.3.

Table 1.3 about here

The unadjusted figures for each year (Unadj.) have been brought forward from Table 1.2 and the figures showing the adjustments due to controls (Adj.) are shown in the columns just to their right. As can be seen, the effects of the controls is dramatic, showing that much of the influence on arts participation often attributed to aging is in fact due to other factors. Note, for example,

that much of the lower classical music concert attendance of the oldest cohort is not due to age per se but is accounted for by the controls. Likewise, the already low rates of the baby boomers are further reduced after controls are taken into account. This is mostly due to their high education and income. The impact of the controls on specific cohorts reported here for classical music will be seen often again for other art forms in the chapters to come.

Looking Forward to the Succeeding Chapters

Chapter 2 focuses on period effects. It seeks out the influences on arts participation that can be attributed to events taking place at the time the 1982 and 1992 surveys were being fielded. While such a period effect can most easily be seen as a discontinuity in an otherwise regular pattern of data points plotted over time, it is possible, by examining a number of bits of information, to suggest period effects in the 1982-92 decade. While no such effects uniformly influenced all the art forms, several genre and age-specific period effects are identified.

Chapter 3 focusing on aging effects. It examines the influence of aging on arts participation net of period, cohort, demographic, and life course influences. The clearest effect of age per se is the withdrawal from live arts participation of the very elderly. The other general observation is that for many art forms, young adults do not participate in great numbers, possibly because they have not been fully socialized to appreciate these arts activities.

Chapter 4 begins the analysis of cohort participation by comparing the rates of live arts participation from one cohort to the next. The analysis confirms speculations made in Chapter 2 that the cohorts born since World War

Two, in spite of their higher levels of education and affluence, are not participating in the arts as often as older cohorts, but there is great variation from one art form to another.

Chapter 5 completes the cohort analysis by following the arts participation of cohorts over the decade-long period. Net of other factors, cohorts do maintain about the same rate of arts participation, but there are differences by age and by art form. As noted above, the participation of the elderly drops, and encouragingly, the participation of the very young does tend to increase to some degree, although this is not true for all art forms.

Chapter 6 examines arts participation via the media of television, radio, and sound recordings. For most arts disciplines media participation is up from 1982 to 1992 and, interestingly enough, older cohorts participate in the arts via the media more than the younger ones, but again there is great variation from one discipline to another.

Chapter 7 desegregates the package of control variables to suggest how the demographic variables and life course events affect arts participation at different stages of life. The demographic variables - education, income, and gender seem to have effects across the full span of years, but, not surprisingly, the life course variables have quite different effects for different age groups.

Finally, Chapter 8 uses the survey questions on music genre preferences to show the changing patterns of taste across the age cohorts. A preference for art music is found most often among those born before 1935, but such highbrows of all ages like many more kinds of music than does the population at large, bringing into question the characterization of highbrows as snobs and suggests possible ways of marketing the arts.

Glossary of Special Terms

In may be useful to explain here the usage of several words and phrases in the pages that follow.

"Age cohort." A group of people born during the same span of years - in this study a span of one decade.

"Age into" also **"mature into."** This takes into account that because of their themes and the usual setting of their performance some art forms only attract those mature enough in years and experience to appreciate them. Grand opera, as it has developed in the twentieth century, is a case in point.

"Age out of" also **"mature out of."** Some forms, because of their themes and usual performance setting seem to attract the young. Pop music is a case in point.

"Arts participation." If not modified by "media" or in some other way, this means attendance at a live arts events, museum attendance, and/or novel reading.

"Cohort Replacement". Over time age cohorts grow older and their numbers thin, while new cohorts are born and begin to move themselves through the stages of life.

"Net of ..." This term means having statistically taken into account and thus being able to disregard the influence of ..., here said of the demographic and/or life course variables.

Figure 1.1 Dates and Names of the Age Groups

Birth Years	Age-Group Designation	
before 1916	Progressivism	
between 1916 & 1925	Roaring 20s	
between 1926 & 1935	Depression	
between 1936 & 1945	World War II	
between 1946 & 1955	Early Boomers	
between 1956 & 1965	Late Boomers	
between 1966 & 1975	Baby Busters	[the 1992 survey only]

Table 1.1

Unadjusted Proportions Attending Live Performances by Age: 1982 and 1992

Age	Classical	Opera	Ballet
77-UP	6.6	1.7	1.9
67-76	12.7	3.4	3.2
57-66	13.1	3.8	4.1
47-56	15.6	4.2	4.3
37-46	15.5	3.7	5.4
27-36	12.3	3.0	5.4
17-26	11.0	2.3	4.4

Table 1.2

Unadjusted Proportions Attending Classical Music Performances

Cohort	1982 Unadjusted	1992 Unadjusted
Pre-1916	9.7	6.8
1916-1925	12.5	14.3
1926-1935	14.6	14.0
1936-1945	17.0	17.0
1946-1955	13.7	13.9
1956-1965	11.5	10.4

Table 1.3

Unadjusted and Adjusted Proportions Attending Classical Music Performances

	1982		1992	
Cohort	Unadjusted	Adjusted	Unadjusted	Adjusted
Pre-1916	9.7	16.8	6.8	11.4
1916-1925	12.5	16.6	14.3	17.2
1926-1935	14.6	16.9	14.0	14.2
1936-1945	17.0	16.7	17.0	14.8
1946-1955	13.7	11.5	13.9	9.5
1956-1965	11.5	9.8	10.4	6.5

CHAPTER 2 January 20, 1995

Period Effects on Arts Participation

War or economic uncertainty may influence participation in all art forms. A series of blockbuster art museum exhibits may impact one art form but not others. The counter-culture of the 1960s influenced most baby boomers but had relatively little impact on those born before World War Two. These are examples of **period effects** (Rogers 1982), the topic of this chapter.

It is impossible with just one set of figures to distinguish between period effects and effects which come from changes in the age structure of the population or from cohort replacement.[1] To provide a practical assessment of period effects net of changes in age structure and cohort composition, it is necessary to compare period effects across both age and cohort groupings simultaneously. Thus Tables 2.1 and 2.2, which show the information analyzed in this chapter show both the rates of participation for age groups and for cohorts.

As noted in Chapter 1, many demographic factors influence arts attendance, and many of these vary by age. Therefore these factors need to be controlled to more accurately assess period effects. We, therefore, examine not only the rates of attendance by age group and cohort, but also these rates of attendance controlling for the eight demographic and life course variables. Where period effects are significant for both adjusted age groups and cohorts, we can be fairly confident that a change in participation is not a function of socio-cultural factors, age structure changes in the population, or cohort replacement, but is a period effect. We can now examine the findings.

Classical Music, Opera, Ballet, and Musicals

Table 2.1 presents data on changes in attendance of classical music, opera, ballet, and musicals between 1982 and 1992 for age groups (in the upper panel) and cohort groups (in the lower panel). The numbers are simply the difference between rates of participation for a given age grouping, with the 1982 proportion subtracted from the 1992 proportion. Consequently, a positive number means the rate of attendance in 1992 was higher for that age or cohort group than it was in 1982, and a negative sign means a decrease in attendance from 1982 to 1992. The * signs next to differences scores indicate whether the difference between attendance in 1982 and 1992 is statistically significant. Specifically, one * sign following a number indicates that a difference this great might have happened by chance five times in one hundred. Two * signs following a number indicates that a difference this great might have happened by chance one time in a hundred; and three * signs following a number indicates that a difference this great might have happened by chance one time in a thousand. The first column for each arts discipline presents the unadjusted differences from the raw proportions, while the second column provides the differences controlling for the bundle of demographic and life course factors -- gender, race, income, education, city size, marital status, and the presence of children in the household.

Global Results Before focusing in detail on the figures for the eight disciplines, it is instructive to look at the figures in the two tables globally. If all the numbers have positive signs it would mean that arts participation is up across the board in 1992 over 1982 showing a pervasive period effect. Alternatively if all the signs are negative it would show a

period effect indicating that arts participation is down across the board from 1982 to 1992.

Looking at the numbers in Table 2.1 for classical music, opera, ballet, and musicals, we see that none of the positive unadjusted figures are statistically significant. When the numbers are adjusted to take into account the demographic factors, most become negative and in the case of classical music and musicals the decrease from 1982 to 1992 is statistically significant for most age groups and cohorts.

Looking at the unadjusted difference figures in Table 2.2 for jazz, theatrical plays, art museums, and books, we see that most are positive and many are significantly so. Controlling for the demographic factors has the effect of reducing all but four isolated positive scores to insignificance.

This first global look at the figures suggests that the recession of 1992 did depress arts participation somewhat from that of the more prosperous year of 1982. More importantly the impact on some art forms was much greater than on others, suggesting pervasive factors, such as the state of the economy, were less important that factors impacting specific disciplines. These will be discussed in the following paragraphs. Finally, this first global look shows the importance of taking into account the demographic controls because there are clear differences between the unadjusted and the adjusted figures in every case. This means that many differences that might otherwise be attributed to changes in age are in fact due to differences in gender, race, income, education, city size, marital status, and the presence of children in the household.

Classical Music Looking first at the figures for classical music that are shown at the left-hand side of Table 2.1. We see that in both the age and cohort panels of the table it seems that a period effect may be operating among the age groups 56 years old and younger. Unadjusted results show that participation rates are down slightly but significantly in the 37-46 age group and the 27-36 age group. Adjusted differences are significantly lower for all but the two oldest age groups. Yet, since only the last two cohorts showed a significant decline in participation, most of the differences are a function of cohort differences rather than true period differences.[1]

What accounts for the classical music results? Cohort differences do not show up in the unadjusted means because many life course transitions and other characteristics about the cohorts have not been taken into account (education, income, etc). What these results are telling us is that even though actual participation is not down very much for any of the cohorts (and is actually up for as many age groups as it is down), the demographic and life course effects should have resulted in more participation for those born since World War Two than it did. The unadjusted participation rates for these younger age groups and cohorts in 1992 about equaled their concert attendance in 1982, but once we control for the fact that these groups were earning more money, had more education, and were entering stages of the life course normally associated with high levels of arts participation, the 1992 adjusted participation rate falls far short of this expectation. This suggests that these factors normally associated with high rates of attendance at classical music concerts, and most notably a college education and no young children in the home, are not leading as many of those born after World War Two to attend as did similarly advantaged members of earlier generations.

Also notable here is the lower attendance of the oldest cohort. People born before 1916 decreased their participation in classical music significantly between 1982 and 1992. By looking at the age panel and the cohort panel together we get an explanation for this finding which is much more amenable to an age-effect interpretation than a period-effect interpretation. When the oldest age groups are compared in 1992 and 1982 there is no significant decrease in participation. However, the majority of the pre-1916 cohort in 1982 are between 67 and 76 years old, while in 1992 the youngest member of this cohort was 76. Hence, the aging of this cohort results in a decline in participation.

Opera and Ballet Notably for opera and ballet there has been little change in rates of participation between 1992 and 1982. Age-related withdrawal is evident in the oldest cohort for opera but not for ballet. The 37-46 age group declines significantly in the adjusted differences for both opera and ballet. Ballet participation rates also fall during this period for both the 1936-1945 and 1946-1955 cohorts. Overall, the declines are very slight, only evident in the adjusted means, and only seem to suggest a period effect for ballet among the older baby boomers (and there is limited evidence for this). We should also note that the unadjusted results show a slight but significant increase in participation in both art forms for the youngest cohort.

Musicals Turning to the final art form presented in Table 2.1, musicals, we do find what seems to be a period effect in attendance at musicals. Looking first at the age-group results, we find that the 27-36 and 37-46 age groups significantly decreased their attendance at musicals between 1982 and 1992. In the adjusted means we find that all of the age groups younger than 66 significantly decreased their attendance at musicals over this time period.

increase in participation, though the decreasing participation of the youngest group is still clearly evident.

We find that the cohort differences shown in the bottom panel are not as dramatic. This suggests that most of the unadjusted age differences between 1982 and 1992 participation is a function of cohort differences in jazz attendance, and tracking the cohorts shows that they did not substantially alter their attendance rates during this period. Only the 1936-1945 cohort significantly increased its jazz attendance over the decade, and the increase is only evident in the unadjusted results. However, the youngest cohort clearly decreased attendance rates in both the adjusted and unadjusted results. Together with the age group findings it seems clear that during this period, young people lowered their attendance rates at jazz concerts, and this decrease was not caused by life course factors or changes in the demographic composition of the cohort since the decrease is evident in the adjusted results. The strength of popular Jazz/Rock fusion music in the early 1980s may have heightened participation by young people during that period.

Plays Attendance at theatrical plays did not vary much from 1982 to 1992 for either age groups or cohorts. Unadjusted results show a significant increase for the 57-66 and 67-76 age groups, but cohort results suggest that this is more of a difference between cohorts than a period effect. Adjusted results show that the 37-46 and 47-56 age groups decreased attendance of plays between 1982 and 1992. Again, however, the continuity in the cohort results suggests that differences between cohorts are responsible for the change in participation rates for age groups, rather than a period effect. Cohort results show a substantial dropoff in participation for the oldest cohort,

which is almost certainly an aging effect rather than one that can be attributed to period.

Art Museums Attendance at art museums is more variable. In the unadjusted results, every age group except the oldest reports a significant increase in museum attendance. However, none of the significant differences hold up in the presence of controls for life course or demographic factors. Further, the cohort results show that most of the age group increases in participation are really cohort differences, rather than period effects. Only the 1926-1935, 1946-1955, and 1956-1965 cohorts showed significant increased participation in the unadjusted results, and only the 1956-1965 group maintains a significant increase in the adjusted results. Period effects do not seem to be operating for these age groups or cohorts.

The oldest age group and cohort, however, both show a significant decrease in the adjusted means. It seems that older Americans were less likely to attend museums in 1992 than they were in 1982 and that this effect was not purely a function of aging. What accounts for this clear age-specific period effect? Perhaps more of the elderly are having their needs for visual arts experience satisfied by the increasing number of visual arts programs on television; We will discuss visual arts enjoyment via TV in detail in Chapter 6. Is it that the more innovative and non-traditional art exhibits of 1992 that attract younger people do not attract many of the elderly? Is it that the presence of greater numbers of young adults and children make museums less of a congenial sanctuary for the elderly? Or is it that more of the elderly find it difficult to get to museums because of a greater fear of crime or deteriorating public transportation? The dynamics of arts participation for the elderly is focal in Chapter 7.

Novels Finally, readership for novels seems to have increased somewhat for several age groups and cohorts. The 27 through 76 age groups all showed significant increases in novel reading in the unadjusted results. These increases also hold for the cohort results, with all cohorts born after 1926 showing a modest but significant increase in the unadjusted results. However, only a few of the results hold up after controls for life course and demographic factors are introduced.

The most robust difference is that for both cohorts and age groups fewer of the oldest Americans read books in 1992 than in 1982. Perhaps TV viewing is significantly replacing reading among the elderly. Increases are apparent for the 27-36 and 37-46 age groups, however the lack of significance of the cohort results suggests that these differences are cohort effects rather than period influences. The 1926-1935 cohort did significantly increase its readership of novels, even in the adjusted results. Overall, novel reading seems to be on the rise in the unadjusted results and stable in the adjusted results. Declines among the oldest age group and cohort may be a function of changes in the content of popular novels, or of competition from other media.

NOTES TO Ch. 2

1. We do not believe that technical statistical solutions for separating period effects from age effects and cohort effects are adequate. While parameters of such models may be possible to identify, the techniques for separating these effects violate basic assumptions (particularly the assumption of 0 correlation among independent variables) of the OLS regression models and ANOVA techniques, making estimates unstable and biased (see Glenn, 1989).

2. We conclude that this is because the age results compare people from different cohorts, but of the same age, at different points in time. In contrast, the cohort results compare people of the same birth cohort when they are ten years older than when they were first studied.

Table 2.1

Period Comparisons: Percentage Change in Arts Participation by Age and Cohort

	Classical		Opera		Ballet		Musical	
Age	Unadjusted 1992-1982	Adjusted 1992-1982	Unadjusted 1992-1982	Adjusted 1992-1982	Unadjusted 1992-1982	Adjusted 1992-1982	Unadjusted 1992-1982	Adjusted 1992-1982
77-UP	.4	-3.1	.1	-1.3	.1	-1.5	.2	-3.5
67-76	3.0*	-.6	.2	-.8	1.1	-.1	2.2	-2.4
57-66	1.5	-2.3*	.5	-.9	.9	-.5	.7	-3.4**
47-56	2.4*	-2.1*	.4	-1.0	.8	-1.2	1.0	-4.4***
37-46	-3.1***	-7.2***	-.4	-1.6***	-.5	-2.4***	-3.0**	-7.3***
27-36	-3.3***	-5.0***	.2	-.4	.0	-.8	-3.8***	-4.9***
17-26	-1.7	-4.2***	.5	-.7	.7	-.8	-1.1	-3.2**

	Classical		Opera		Ballet		Musical	
Cohort	Unadjusted 1992-1982	Adjusted 1992-1982	Unadjusted 1992-1982	Adjusted 1992-1982	Unadjusted 1992-1982	Adjusted 1992-1982	Unadjusted 1992-1982	Adjusted 1992-1982
Pre-1916	-2.9	-5.4***	-1.0	-2.3**	-.5	-1.7	-3.8*	-6.2***
1916-1925	1.8	.6	-.1	-.2	.1	-.1	-2.9*	-3.8**
1926-1935	-.6	-2.7*	.1	-.9	.7	-.1	-1.9	-3.6**
1936-1945	.0	-1.9	.5	-.2	-.9	-1.9**	-.7	-3.6**
1946-1955	.2	-2.0*	.6	.0	-.3	-1.3*	-.8	-3.5***
1956-1965	-1.1	-3.3***	1.0*	.7	1.3*	.6	-.2	-2.7**

* = Change is significant at the .05 level.
** = Change is significant at the .01 level.
*** = Change is significant at the .001 level.

Table 2.2

Period Comparisons: Percentage Change in Arts Participation by Age and Cohort

	Jazz		Plays		Art Museum		Books	
Age	Unadjusted 1992-1982	Adjusted 1992-1982	Unadjusted 1992-1982	Adjusted 1992-1982	Unadjusted 1992-1982	Adjusted 1992-1982	Unadjusted 1992-1982	Adjusted 1992-1982
77-UP	.3	-1.3	1.1	-2.4	.5	-4.5*	-.3	-5.4*
67-76	2.4*	.7	3.1*	.3	5.4***	.3	7.0***	2.0
57-66	3.6***	1.3	4.1***	1.0	5.9***	.4	6.0***	2.0
47-56	2.9***	.2	2.0	-2.2*	6.5***	-.3	6.6***	.5
37-46	4.8***	1.9*	.6	-2.7**	4.9***	-.3	8.1***	3.5**
27-36	.9	-.6	-.4	-1.3	2.1*	1.1	2.6*	2.8*
17-26	-4.7***	-6.2***	1.2	-.9	4.9***	2.3	-.6	-2.1

	Jazz		Plays		Art Museum		Books	
Cohort	Unadjusted 1992-1982	Adjusted 1992-1982	Unadjusted 1992-1982	Adjusted 1992-1982	Unadjusted 1992-1982	Adjusted 1992-1982	Unadjusted 1992-1982	Adjusted 1992-1982
Pre-1916	-.2	-1.3	-2.6	-5.2***	-3.4	-6.5***	-4.2*	-7.3***
1916-1925	.2	.1	1.7	1.2	.8	-.2	.6	.1
1926-1935	1.3	.0	.9	-.3	3.2*	1.2	3.6*	3.3*
1936-1945	1.8*	-.2	1.8	.1	1.2	-2.4	2.9*	1.0
1946-1955	.4	-1.9*	2.1*	.4	4.2***	1.4	4.2***	1.9
1956-1965	-4.5***	-3.3***	1.3	.0	5.4***	3.7***	4.5***	1.3

* = Change is significant at the .05 level.
** = Change is significant at the .01 level.
*** = Change is significant at the .001 level.

35

BEST COPY AVAILABLE

Age Differences in Arts Participation

In this chapter we examine the effects of aging on arts participation. Here age a time of life, much as when one says a child is "just going through a stage." We also ask whether there are differences in participation by age net of period and cohort effects when demographic and life-course factors are controlled. Since most age differences in participation likely result from life course events (such as the onset and conclusion of childrearing, marriage, divorce, widowhood, etc.), statistically controlling for these factors allows us to examine differences across age groups which likely result from the aging process, per se. In this way we will see whether the young are less attracted to the arts than are those in mid-life and the elderly.

We will also see whether aging affects the rates of attendance differently from one art form to another and whether these age-specific attendance rates have changed from 1982 to 1992. Examining groups of comparable ages at two points in time gives us age groups comprised of individuals of different birth cohorts. By controlling for the year that the data were collected, we examine age differences in arts participation with the effect of cohort removed. In the next chapter we present a systematic examination of aging influences over time by demonstrating aging effects in specific cohorts.

Classical Music, Opera, Ballet, and Musicals

Table 3.1 presents the proportion of respondents from each age group who attended a classical music performance, a ballet, an opera, or a musical in the twelve months preceding the interview. The first row of data for each art form presents the unadjusted proportion, while the second contains proportions adjusted for life course and demographic factors, the final row for each art

form lists proportions adjusted for these factors and also for the year that individuals were interviewed, thus eliminating cohort differences and period effects thus leaving just the effects due to age. The letters "a" to "ff" following the figures in Tables 3.1 and 3.2 indicate the level of statistical significance of the difference between the rates for specific age groups. For the specific meaning of the letters see the note following tables 3.1 and 3.2.

Classical Music In the unadjusted results, attendance at classical music performances follows a curvilinear pattern -- low among young and old and high in the middle age groups. The age group whose members are 77 and over has the lowest level of participation, at least in these unadjusted results, and the elder's rate of participation differs significantly from every other age group as evidenced by the "aa" following each of the subsequent age-specific rates. The unadjusted rate of participation peaks in the 37-46 and 47-56 age-groups, both of which attend classical performances significantly more frequently than the 57-66 and 67-76 age groups. Attendance tapers off again in the 17-26 and 27-36 age groups.

When controls for demographic factors and for year of the study are introduced, the curvilinear pattern becomes less pronounced at the upper end of the age distribution. This means that much of the difference between the oldest age group and other age groups is accounted for by life course and demographic influences. In the adjusted results the over-77 group is no longer found to be significantly less likely to attend a performance than are members of the 37-46 age group, and what is more impressive, they are more likely to attend than either 17-26 or 27-36 year olds.

We can conclude from these findings first, that middle-aged groups contain the highest proportion of respondents who attend classical music performances. Second, the oldest age group has substantially lower participation than other age groups, but this low attendance is mostly accounted for by demographic differences and life course transitions rather than aging per se. Fixed incomes, lower levels of education, and widowhood play a substantial role in this age group's low unadjusted attendance rate. For further discussion of the specific factors that affect the attendance of older people, see Chapter 7.

Third, the youngest age groups have low classical music attendance rates, and their low participation is not improved by controlling for life course events and demographic factors. It is possible that the boomer cohorts may eventually mature into an appreciation for classical music, but this ignores the possibility that cohort experiences may be the cause of their low rates of attendance. Hence, there is no guarantee that these young cohorts will ever mature into classical music concert attenders.

Opera In the unadjusted results, opera attendance follows the same curvilinear pattern found for classical music. All but the youngest age group attends opera at a significantly higher rate than the over-77 age group, and reciprocally, the youngest age group has significantly lower attendance rates than all other age groups save the oldest. There is less variability in attendance across the age groups, however, with only a 2.5% difference between the highest and lowest participation rates for the age groups. Furthermore, the 57-66 age group has attendance rates as high as the 37-46 age group making

opera audiences somewhat older. Because of the small percentage differences, fewer of the age groups differ significantly from one to another.

Looking at the adjusted results in the bottom rows, we again find that low participation rates among the oldest respondents are largely accounted for by demographic and life course factors. In fact, the adjusted results show strong support for opera among the older age groups. The 47-56, the 57-66 and the 67-76 age groups have the highest attendance rates, and as in the unadjusted results, the younger age groups are significantly less inclined to attend opera than any of the older age groups, and the 17-26 year olds even attend significantly less than those just a decade older.

As was the case with classical music, we find that many of the age differences in opera attendance are accounted for by demographic and life course influences. This is especially the case for low participation rates among the oldest age groups. We can conclude, therefore, that participation rates for the youngest age groups are substantially lower than those for older age groups, and this is not a function of life course events or demographic composition. Again, there is no clear reason to suspect that younger age groups will mature into opera attenders, hence these age differences may really be cohort differences.

Ballet Although the unadjusted age group attendance pattern for ballet is somewhat curvilinear by age, the apex of the curve is much younger than that for opera. The highest rates of ballet attendance are among those age 27-36 and 37-46, and these two age groups were significantly more active ballet attenders than the four older age groups. Indeed, even the youngest age group

attended ballets significantly more often than the oldest two age groups, though significantly less than the 27-36 and 37-46 year olds.

Turning to the adjusted results, we find a much flatter participation - landscape because almost all of the age variations in ballet attendance are accounted for by demographic and life course factors. Only the youngest age group differs significantly from the others, having substantially lower rates of ballet attendance than all other groups, once controls are introduced.

As with classical music and opera, low rates of attendance at ballet performances among the oldest age group is explained by demographic and life course factors. Indeed, most of the age differences in ballet attendance are erased by the demographic and period controls. What is remarkable about ballet compared to the other two disciplines discussed so far is that the ballet audience is younger, and only the youngest age group shows a substantially lower rate of attendance than the other age groups.

Musicals The unadjusted proportions show that attendance at musicals peaks at age 47-56, with 37-46 year olds attending almost as frequently. Rates of attendance are lowest in the oldest age group, with the 67-76 age group also reporting low attendance rates. Indeed, every age group has significantly higher musical attendance rates than these oldest two groups. The 27-36 age group participates significantly less than the 37-46 and 47-56 age groups, though they attend significantly more than the 17-26 group.

Turning to the adjusted results, we once again find that the low rates of the oldest two age groups are largely a function of demographic and life course factors. Indeed after controls, no group is significantly higher on musical attendance than the 67-76 age group, and they are found to attend more

frequently than the 17-26 and 27-36 age groups. The oldest age cohort is still found to have significantly lower attendance rates at musical performances compared to the 37-46, 47-56, and 57-66 age groups, and its low rate is comparable to the participation rates of the 27-36 and 17-26 age groups.

Once again we find that the age distribution of participation is somewhat curvilinear, with the bulk of participation coming from the middle age groups, and we again find that much of the drop-off in older Americans' participation is the result of demographic and life course factors. But the lower rates of participation among younger age groups cannot be fully understood until we consider cohort differences. An age-effect explanation posits that these younger people will mature into loyal patrons of the arts, while a cohort explanation, to which we turn in the next chapter, implies that participation rates will remain low for these younger Americans even as they grow older.

Jazz, Plays, Art Museums, and Novels

Table 3.2 presents rates of attendance at jazz performances, plays, art museums, and rates of novel reading for the seven age groups. As in Table 3.1 the unadjusted figures are presented, followed by the figures which have been adjusted for demographic and life course factors, and then the figures that take into account the year of the study as well.

Jazz Unlike any of the other disciplines, the attendance at jazz performances is much higher in the youngest age groups. Turning first to the unadjusted figures, significantly more of the 17-26 year olds attended a jazz performance than any other age group, and attendance drops for each successive older age group. The drop-off in participation is significant for every

adjacent age group with the exception of the 67-76 and 77 and over age groups. Controlling for demographic and life course factors does not change the linear pattern of attendance declining with age, and only reduces the levels of significance for adjacent age groups.

The linear age patterning of jazz attendance is very interesting. If it is the result of an age effect we should see a drop off in participation for cohorts tracked over time. However, jazz may not be the discipline of the "young" but the choice of younger cohorts, in which case the future of jazz looks very promising as these younger cohorts age.

Plays The unadjusted figures for age differences in attendance at stage plays recalls the now familiar curvilinear pattern of attendance found for classical music, opera, ballet, and musicals in that the unadjusted results find the oldest age group significantly lower in their rates of attendance compared with all other age groups. Attendance at plays is highest among 37-46 and 47-56 year olds, and these two groups have significantly higher attendance compared to all other age groups. The 27-36 group has significantly higher participation rates compared to the two oldest groups, but the youngest age group only manages to attend at a higher rate than the oldest age group.

Controlling for demographic and life course factors, we find that the curvilinear pattern of attendance by age remains, and the low participation rates of the oldest age group are shown to be partly a function of life course and demographic factors. Nonetheless, even after the controls are introduced, the oldest age group remains less active in their play attendance when compared to all but the two youngest age groups, who, in turn, are signifi-

cantly less frequent patrons of plays than are the 37-46, the 47-56, the 57-66 and the 67-76 age groups.

In sum, play attendance follows the pattern of age-related participation found for classical music, opera, ballet, and musicals. Once again it is important to note that the low levels of participation among the very oldest age groups are shown to be largely a function of demographic and life course factors. And the low rates of participation among the youngest age groups may be evidence of arts "immaturity" -- implying that they will grow to appreciate and attend plays when they get older -- alternatively these low participation rates may result from cohort differences which will not go away over time. We will consider these two possibilities further in analyzing the data for age cohorts in the next chapter.

Art Museums The unadjusted figures show that art museum attenders are young. Patronage of art museums is highest in the 27-36 age group and in the 37-46 age group, both of which have significantly higher rates of attendance compared to all of the other age groups. The lowest rate of museum attendance is in the over-77 age group, which has significantly lower participation than all of the other groups, and the 67-76 age group is also significantly lower on museum attendance compared to all of the younger groups. The 47-56 age group is found to attend art museums significantly more than the 57-66 age group, making the overall unadjusted relationship somewhat curvilinear with an early peak.

The adjusted results are a bit flatter. The oldest age group remains significantly lower in its attendance compared to all other groups, though the 67-76 age group raises its participation to the point at which it is no longer

significantly different from any of the younger age groups. The 27-36 and 37-46 groups stay atop the participation ratings, both are significantly higher in museum attendance compared to the 17-26 group, and the attendance of the 37-46 age group is also significantly higher than that of the 47-56 age group.

These results show that museum attendance is much more common at younger ages, though the relationship is made somewhat curvilinear by the drop-off in participation of the very youngest age group. Once again we have found that the lower levels of participation by the oldest Americans is largely explained by the demographic and life course factors, however controls for these factors do not come close to eradicating the differences between the oldest age group and other age groups. Aging seems to be taking its toll on art museum attendance among the very old, likely because of the physical activity involved in walking through museum exhibits. Turning to the attendance at art museums of those born after World War Two, only the youngest age group shows a low rate. Again, the youngest group may mature into museum attendance, or this difference may reflect cohort differences which will remain through out their lives. We shall be better able to predict which after examining the cohort differences in Chapter 4.

Novels Finally, Table 3.2 presents rates of novel reading for the seven age groups. Based on the results presented for the other art forms, we should predict that the oldest age group would show the lowest rate of novel reading, and the unadjusted data confirm this prediction.

Novel reading is most frequent among the 27-36 year olds and the 37-46 year olds, and both groups have significantly higher rates than the next most

prolific readers, the 17-26 year olds. Among the four oldest cohorts, advancing age is directly associated with a lower rate of novel readership.

Statistical controls for demographic and life course factors even out the reading rates of the age groups considerably. The oldest age group improves after controls for these factors, however the oldest group continues to have significantly lower rates of reading than all of the other groups.

These results clearly show that the majority of the age differences in novel reading are a function of demographic and life course factors. Aging seems to play a part in that the oldest age group has lower rates of reading even after controls for demographic and life course factors. This may reflect the failing eyesight of many of the elderly, a question to which we turn in Chapter 7.

Table 3.1

Age Group Comparisons from 1982 and 1992 SPPA:
Unadjusted, Controlling for Demographics, and Controlling for Demographics and Period

	77-UP	67-76	57-66	47-56	37-46	27-36	17-26
Classical[1]	6.6	12.7[aa]	13.1[aa]	15.6[aabbcc]	15.5[aabbcc]	12.3[aaddee]	11.0[aabccddeef]
Classical[2]	13.1	17.6[aa]	15.7[ab]	16.1[aa]	13.6[bbccdd]	9.8[aabbccddee]	9.0[aabbccddee]
Classical[3]	13.4	17.9[aa]	15.8[ab]	16.3[aab]	13.9[bbccdd]	9.8[aabbccddee]	8.4[aabbccddeef]
Opera[1]	1.7	3.4[aa]	3.8[aa]	4.2[aa]	3.7[aa]	3.0[acdde]	2.3[bbccddeef]
Opera[2]	3.4	5.0[aa]	4.5	4.4	3.3[bbccdd]	2.3[bbccddee]	1.3[aabbccddeeff]
Opera[3]	3.5	5.1[aa]	4.5	4.4	3.3[bbccdd]	2.3[abbccddee]	1.1[aabbccddeeff]
Ballet[1]	1.9	3.2	4.1[aa]	4.3[aab]	5.4[aabbccdd]	5.4[aabbccdd]	4.4[aabeeff]
Ballet[2]	4.6	5.4	5.3	4.5	4.5	4.4	3.2[bbccddeeff]
Ballet[3]	4.7	5.5	5.3	4.5	4.6	4.4[b]	3.0[abbccddeeff]
Musical[1]	7.6	14.4[aa]	18.8[aabb]	21.5[aabbcc]	21.3[aabbcc]	18.9[aabbddee]	16.6[aabccddeeff]
Musical[2]	15.4	20.0[aa]	21.2[aa]	21.0[aa]	18.7[aaccdd]	16.4[bbccddee]	15.3[bbccddee]
Musical[3]	15.9	20.3[aa]	21.3[aa]	21.1[aa]	19.1[accdd]	16.3[bbccddee]	14.6[bbccddeef]

1. Unadjusted Mean 2. Adjusted for Demographics 3. Adjusted for Demographics and Period.

a = difference from 77 and up significant at .05 level
aa = difference from 77 and up significant at .01 level
b = difference from 67 to 76 significant at .05 level
bb = difference from 67 to 76 significant at .01 level
c = difference from 57 to 66 significant at .05 level
cc = difference from 57 to 66 significant at .01 level
d = difference from 47 to 56 significant at .05 level
dd = difference from 47 to 56 significant at .01 level
e = difference from 37 to 46 significant at .05 level
ee = difference from 37 to 46 significant at .01 level
f = difference from 27 to 36 significant at .05 level
ff = difference from 27 to 36 significant at .01 level

Table 3.2

Age Group Comparisons from 1982 and 1992 SPPA:
Unadjusted, Controlling for Demographics, and Controlling for Demographics and Period

	77-UP	67-76	57-66	47-56	37-46	27-36	17-26
Jazz[1]	1.4	3.2	5.8[aabb]	7.8[aabbcc]	10.0[aabbccdd]	12.5[aabbccddee]	15.9[aabbccddeeff]
Jazz[2]	5.5	6.4	7.2	8.0[ab]	9.2[aabbccd]	12.0[aabbccddee]	13.1[aabbccddeef]
Jazz[3]	5.6	6.4	7.3	8.0[ab]	9.3[aabbccd]	12.0[aabbccddee]	13.0[aabbccddee]
Plays[1]	4.6	11.0[aa]	12.7[aab]	15.1[aabbcc]	14.7[aabbcc]	12.8[aabddee]	11.6[aaddee]
Plays[2]	10.7	15.9[aa]	15.3[aa]	15.4[aa]	12.8[abbccdd]	10.5[bbccddee]	9.4[bbccddee]
Plays[3]	10.8	16.0[aa]	15.3[aa]	15.5[aa]	12.9[abbccdd]	10.5[bbccddee]	9.2[bbccddeef]
Art Museum[1]	8.0	16.1[aa]	20.6[aabb]	23.6[aabbcc]	28.6[aabbccdd]	27.8[aabbccdd]	25.2[aabbcceeff]
Art Museum[2]	18.5	23.7[aa]	24.2[aa]	23.3[aa]	25.5[aad]	24.4[aa]	21.9[aceeff]
Art Museum[3]	18.4	23.6[aa]	24.2[aa]	23.3[aa]	25.4[aad]	24.4[aa]	21.9[aceeff]
Books[1]	40.0	49.2[aa]	54.9[aaabb]	57.6[aabbc]	62.4[aabbccdd]	63.5[aabbccdd]	60.3[aabbccddeff]
Books[2]	51.2	57.4[aa]	59.2[aa]	57.4[aa]	58.2[aa]	59.4[aad]	58.9[aa]
Books[3]	51.1	57.3[aa]	59.2[aa]	57.3[aa]	58.2[aa]	59.4[aad]	59.1[aa]

1. Unadjusted Mean 2. Adjusted for Demographics 3. Adjusted for Demographics and Period.

a = difference from 77 and up significant at .05 level
aa = difference from 77 and up significant at .01 level
b = difference from 67 to 76 significant at .05 level
bb = difference from 67 to 76 significant at .01 level
c = difference from 57 to 66 significant at .05 level
cc = difference from 57 to 66 significant at .01 level
d = difference from 47 to 56 significant at .05 level
dd = difference from 47 to 56 significant at .01 level
e = difference from 37 to 46 significant at .05 level
ee = difference from 37 to 46 significant at .01 level
f = difference from 27 to 36 significant at .05 level
ff = difference from 27 to 36 significant at .01 level

CHAPTER 4 January 20, 1995

Comparisons of Arts Participation Across Cohorts

One of the most important concepts for understanding age-related patterning of arts participation is that of cohort -- a group of individuals born at roughly the same time and thereby sharing a variety of socio-historical experiences. Baby boomers and those who came to maturity during the Great Depression of the 1930s are two examples of age cohorts. The defining experiences of a cohort's socialization can make cohorts distinctive from one another, and this distinctiveness may persist over the life course and be relatively impervious to later life course influences. In so far as the socializing experiences of a cohort are unique, they will influence the rates of participation in some or all of the arts, and what is crucial for cohort effects, these influences will persist as the cohort moves through the life-cycle. Thus, cohort effects differ from the age-effects discussed in Chapter 3 because, while age-effects take place over the life course for all individuals no matter when they were born, cohort effects yield unique influences on the attendance of each cohort.[1]

Cohorts are focal in this and the following chapter. Here in Chapter 4 we will use data from the 1982 and 1992 SPPA to examine differences in arts participation for the seven different birth cohorts studied. These are pre-1916; 1916-1925; 1926-1935; 1936-1945; 1946-1955; 1956-1965 cohorts; and the 1966-1975 cohort from the 1992 SPPA only.[1] In order to remove life course and aging effects on participation, we will control for demographic and life course factors and also for the year of the study. In Chapter 5 we will look at how cohorts changed their participation between 1982 and 1992 to identify the role that a decade of aging played in changing rates of participation.

Classical Music, Opera, Ballet, and Musicals

Table 4.1 presents rates of participation in classical music, opera, ballet, and musicals for the seven birth cohorts. As in the last chapter, the results are presented in three ways for each art form: unadjusted proportions; proportions adjusted for demographic and life course factors; and, proportions adjusted for these and the year of the study as well. Again, the control for year of the study allows us to examine differences between cohorts with the effect of aging within cohorts removed.

Classical Music The unadjusted results in Table 4.1 show that attendance at classical music performances is highest among those born between 1936 and 1945 and lowest in the oldest cohort and youngest cohorts. As with the aging results, the patterns of attendance across cohorts appears curvilinear. And in the unadjusted results, every cohort, with the exception of the youngest, has significantly higher rates of classical music attendance compared to the pre-1916 cohort. The 1936-1945 cohort has significantly higher participation than all other cohorts. While the 1956-1965 cohort has significantly higher participation that the pre-1916 cohort, both the 1956-1965 and the 1966-1975 cohorts have significantly lower attendance rates than the 1916-1925, 1926-1935, 1936-1945, and 1946-1955 cohorts.

Looking at the adjusted results for classical music we find that the curvilinear pattern disappears once controls for life course and demographic factors are introduced. Indeed, the adjusted pattern is best described as a plateau across the four older cohorts which then falls farther for each succeeding Post World War Two cohort. Beginning with the 1946-1955 cohort -- the older baby boomers -- adjusted participation rates for each cohort are significantly lower than the rates for every older cohort. The younger

boomers are significantly lower than the older boomers, and the youngest cohort in turn has significantly fewer classical music patrons than the young boomers.

The first important finding that emerges when demographic factors are taken into account in Table 4.1 is that the lower participation rates among the oldest cohort is a function of demographic and life course factors, rather than being a genuine cohort difference in participation. The second important finding is that all the younger cohorts show clear cohort effects.

The low adjusted participation rates for cohorts born since World war Two could signal problems for the future of live classical music if these groups do not age into classical music attendance. The sharp break between the pre-World War Two cohorts and the baby boomers suggests of a cohort effect that continues to operate in the subsequent cohorts. Further, the dramatic differences in participation which are evident when controls for demographic and life course factors are introduced suggest that the influences of these factors on classical music participation are not as strong as they were for earlier cohorts. While the post-World War Two cohorts are much more educated than those that came before them, the link between high levels of education and classical music attendance is not as strong for them as it is in the earlier cohorts. With the opening up of higher education after World War II the elite character of a college education was lost, and with it some of the tie to elite arts consumption disappeared.

Opera Because of the relatively low rates of opera attendance, differences between cohorts are more difficult to discern. Generally, the picture looks much more stable across cohorts, but the steep decline in participation among

the younger cohorts that we found for classical music is also evident for opera attendance. As was the case with classical music, the unadjusted results show that attendance at operas peaks in the 1936-1945 cohort and is lowest in the oldest cohort and in the youngest two cohorts. The 1916-1925, 1926-1935, and 1936-1945 cohorts have significantly higher rates of opera attendance than do the pre-1916 and 1956-1965 cohorts. The 1926-1935 and 1936-1945 also have significantly higher rates of opera participation than the 1946-1955 and 1966-1975 cohorts.

Looking at the adjusted results, we see that members of older cohorts comprise an even higher proportion of the opera audiences than was true for classical music concert-goers. For example, once adjustments for demographic and life-course factors are taken into account, the 1936-1945 cohort is found to have somewhat lower rates of opera participation compared to the 1916-1925 cohort. As observed for classical musical attendance, we find that opera attendance is dramatically lower among the older baby boomers (the 1946-1955 cohort) and in all subsequent cohorts. In the adjusted results, each cohort born after 1946 has significantly lower opera attendance than all cohorts born before 1946. Further, the younger boomers (1956-1965) and the youngest cohort have significantly lower opera attendance rates than do the older boomers.

These results suggest that opera is a discipline with a "greying" audience. Given the dramatic drop between the World War II cohort (the 1936-1945 cohort) and the oldest baby boom cohort (1946-1955) it is unlikely that aging will induce these later cohorts to mature into opera participation. Again, adjustments for life course factors and demographics account for the low participation rates of the oldest cohort, showing that the unadjusted

differences are not the result of cohort effects but of life course and demographic factors.

Ballet Table 4.1 shows that younger cohorts are substantially more likely to be found in the audience for ballet than in opera or classical music audiences. Indeed in the unadjusted results even the youngest cohorts attend ballet at rates nearly matching those of the 1936-1945 cohort, which has the highest participation rate. The pre-1916 cohort has the lowest attendance rate for ballet--significantly lower than every other cohort in the unadjusted results. The cohorts born between 1936 and 1965 also have significantly higher ballet attendance than the 1916-1925 cohort. The 1936-1945 and 1946-1955 cohorts are also found to have significantly higher rates of attendance than the 1926-1935 cohort in the unadjusted results.

Once controls are introduced for demographic and life course factors, the story changes. Again starting with the older baby boomers, the younger cohorts have significantly lower rates of participation compared to the cohorts born before 1946. The youngest cohort is even found to have significantly lower ballet attendance than the older boomers until controls for year of the study are introduced.

After controls for demographics and life course factors the results for ballet attendance look rather like those for opera and classical music. However, it is clear from the unadjusted results that the picture is not nearly as grim for ballet. While younger cohorts are not attending as much as they "should," given their high levels of education, life course position, income, and the like, they are attending at a rate comparable to the older cohorts. If audiences mature into ballet participation, the younger cohorts

will match their elders in ballet attendance. Finally, the adjusted results reveal that lower rate of participation among the oldest cohort, as was true for the other art forms discussed, is a function of life course factors and the demographic composition of this cohort and are not the result of cohort effects on participation.

Musicals The unadjusted results show that attendance at musicals is lowest for the oldest cohort, peaks in the 1936-1945 cohort, and declines again for the younger cohorts. Thus once again we find the now familiar curvilinear pattern. In the unadjusted results, every cohort has higher attendance at musicals compared to the oldest cohort and the participation of the younger cohorts taper off as well. The 1926-1935, 1936-1945 and 1946-1955 cohorts have significantly higher musical attendance than the 1916-1925 cohort. While the 1956-1965 and 1966-1975 cohorts have higher attendance than the oldest cohort, they are significantly lower than the 1926-1935, 1936-1945 and 1946-1955 cohorts.

Turning to the adjusted results, we find that the 1916-1925 and 1926-1935 cohorts have significantly higher participation rates than the oldest cohort. However, the oldest cohort is found to have significantly higher participation compared with the older baby boomers and subsequent cohorts. Thus the pattern of low attendance in the younger cohorts is once again revealed, with the youngest three cohorts having significantly lower participation than the oldest four cohorts (the only exception being the significance of the difference between the older boomers and the pre-1916 cohort when controls for year of the study are introduced). Also, the younger boomer

cohort is found to have significantly lower participation compared with the older boomers.

In conclusion, overall rates of attendance at musicals are high compared to rates of participation in the other disciplines examined in Table 4.1, and yet cohort differences follow a pattern much like that observed for classical music concert attendance, with participation lower in the younger cohorts. There seems to be a genuine cohort effect depressing attendance at musicals starting with the older baby boom cohort and continuing through the younger cohorts. Again, the low rates of musical attendance among the pre-1916 cohort were found to be a function of life course factors and demographic composition, and not a cohort effect.

Jazz, Plays, Art Museums, and Novels

Table 4.2 presents the cohort comparisons for attendance at jazz performances, plays, art museums, and for reading novels. As above, results are presented unadjusted, adjusted for demographic and life course factors, and adjusted for the year of the study as well.

Jazz The unadjusted results show that jazz attendance is most frequent in the younger cohorts, with the highest level of attendance registered by the 1956-1965 cohort. The lowest level of jazz attendance is in the pre-1916 cohort, which has significantly lower attendance compared with all other cohorts. The 1916-1925 cohort has the second lowest attendance, being significantly lower than all subsequent birth cohorts. Continuing this pattern, both the 1926-1935 and 1936-1945 cohorts are found to have significantly lower rates of jazz participation than any younger cohort. Finally,

the youngest 1956-1965 cohort has significantly higher participation compared with all other cohorts.

Turning to the adjusted results we find little change from one cohort to the next. While life course and demographic factors account for some of the difference between the oldest cohort and subsequent ones, these controls do not eradicate these cohort effects. Even after controls, the 1956-1965 cohort is found to have significantly higher rates of jazz attendance compared to all other cohorts.

The adjusted results show that attendance at jazz performances was much higher among the younger cohorts, and that the controls for demographic and life course factors have little impact on these cohort differences. At the same time, the youngest cohort now has significantly lower participation than the 1946-1955 cohort. This pattern of higher rates of jazz attendance for the post World War Two cohorts is very different from the patterns we have seen for the other arts disciplines examined so far. These findings for jazz suggest that, as these young cohorts replace older ones, we can expect that overall jazz attendance will grow.

Plays As was the case with the first four arts disciplines we examined, attendance at theatrical plays is highest for the 1936-1945 cohort, which has significantly higher attendance rates compared to all other cohorts in the unadjusted results. The lowest play attendance rate is for the oldest cohort, which attends significantly less than all other cohorts. The 1916-1925 cohort is found to have significantly lower attendance at plays compared to the 1926-1935, 1936-1945, and 1946-1955 cohorts. The 1926-1935 and 1946-1955 cohorts

have significantly higher rates of play attendance when compared to the 1956-1965 and 1966-1975 cohorts.

Looking at the adjusted proportions, we find that controlling for demographic and life course factors eliminates most of the differences between the oldest cohort and other groups. The 1916-1925 and 1926-1935 cohorts are found to have significantly higher rates of attendance at plays than the oldest cohort. The 1936-1945 cohort has lower participation than the 1926-1935 cohort, once controls for life course and demographic factors are introduced. The adjusted results find the pre-1916 cohort participating at a significantly higher rate than the 1946-1955, 1956-1965, and 1966-1975 cohorts. Indeed, all of the cohorts born prior to 1946 have significantly higher rates of attendance at plays than do all of the cohorts born after 1946. This consistent baby boom dividing line suggests that cohort effects are responsible for these differences.

The results for attendance at plays are very much like those for musicals, in that the pattern of low participation among the young is evident in the unadjusted results and is magnified by the adjusted proportions. However, as was the case for musicals, overall participation is fairly high and the younger cohorts are not abandoning this discipline. As with most other disciplines, we also find that the withdrawal of the oldest cohort from attendance is largely a function of life course factors and the demographic composition of this birth cohort.

Art Museums In contrast to the results obtained for other art forms, the youngest cohort ranks second in its attendance at art museums. Its rate is exceeded only fractionally by the 1946-1955 cohort, and both these cohorts are

significantly higher in their attendance rates than the cohorts which follow them - those born between 1936 and 1945 and between 1956 and 1965. These birth cohorts in turn have significantly higher attendance rates than the three oldest cohorts.

Looking next at the adjusted proportions, we find many fewer significant differences. Clearly most of the differences we found in the unadjusted figures are thus attributable to life course factors and demographic composition differences between the cohorts rather than to genuine cohort differences. The oldest cohort remains significantly lower on museum attendance compared with the 1916-1925, 1926-1935, 1936-1945, and 1946-1955 cohorts. And we also find that the 1956-1965 cohort has significantly lower participation compared with the 1936-1945 cohort.

Overall, the findings for art museums suggest that cohort differences have little to do with rates of museum attendance. Most of the unadjusted differences between cohorts are actually a function of life course and demographic factors. The low participation rate which is still evident in the oldest cohort is probably an aging effect which cannot be controlled away.

Novels Table 4.2 shows that the unadjusted proportion of novel readers is highest in the older baby boom cohort, which has significantly higher readership rates than all other cohorts with the exception of the younger baby boom cohort. Indeed, the latter cohort has significantly higher rates of reading than all of the cohorts with the exception of the older boomers, thus making the two baby boom cohorts the most active consumers of this particular form of artistic expression. The pre-1916 cohort has the lowest readership rate of any of the cohorts, and the unadjusted results find them significantly less

active readers than all other cohorts. Among the three pre-World War II cohorts, the older the cohort, the lower the readership rate.

Most of the cohort differences are eliminated by introducing the demographic controls, meaning that most of the differences were a function of life course factors and the demographic composition of the cohorts. One thing that remains is the finding that the oldest cohort reads less than all of the other cohorts, the only exception being the youngest cohort when controls for year of the study are introduced. The two baby boom cohorts are found to read significantly more than the 1936-1945 cohort, and the 1966-1975 cohort has significantly lower rates of reading than the young boomers (1956-1965).

Just as we found for art museum attendance, novel reading is found most often among the younger cohorts, however most of the differences are attributable to differences in demographic composition and life course events. The lower readership among the elderly may be more of an aging effect which cannot be controlled away. Thus, in the case of novel reading, genuine cohort effects are not evident.

Notes to Chapter 4

1. Tracing cohorts also provides a useful analytic strategy for sorting out aging effects, as we observed in Chapter 3, because birth cohorts can be tracked over time to see the effects of aging on participation.

2. The 1966-1975 cohort was too young at the time to be surveyed for the 1982 SPPA survey.

Table 4.1

Cohort Comparisons from 1982 and 1992 SPPA: Unadjusted Proportions, Proportions Adjusted for Demographics, and Adjusted for Demographics and Period.

	Pre-1916	1916-25	1926-35	1936-45	1946-55	1956-65	1966-75
Classical[1]	9.0	13.1[aa]	14.3[aa]	17.0[aabbcc]	13.8[aadd]	11.1[aabbccddee]	9.8[bbccddee]
Classical[2]	15.9	17.1	16.2	16.3	11.1[aabbccdd]	8.6[aabbccddee]	5.8[aabbccddeeff]
Classical[3]	15.3	16.9	16.1	16.2	11.0[aabbccdd]	8.7[aabbccddee]	7.1[aabbccddee]
Opera[1]	2.6	3.6[a]	4.0[aa]	4.1[aa]	3.1[cdd]	2.5[bbccdd]	2.6[ccdd]
Opera[2]	4.5	4.8	4.5	3.9[b]	2.4[aabbccdd]	1.7[aabbccdde]	0.8[aabbccddee]
Opera[3]	4.5	4.8	4.5	3.9[b]	2.4[aabbccdd]	1.7[aabbccdde]	0.9[aabbccddee]
Ballet[1]	2.3	3.7[aa]	4.2[aa]	5.3[aabbc]	5.3[aabbcc]	4.7[aab]	4.8[aa]
Ballet[2]	5.2	5.6	5.0	4.9	4.1[abbcd]	3.5[aabbccdd]	2.6[aabbccdde]
Ballet[3]	5.0	5.5	5.0	4.9	4.1[bbcd]	3.6[aabbccdd]	2.9[aabbccdd]
Musical[1]	10.6	17.4[aa]	20.4[aabb]	22.5[aabbcc]	20.3[aabbdd]	16.9[aaccddee]	15.9[aaccddee]
Musical[2]	18.9	21.5[aa]	21.7[aa]	20.7	16.9[abbccdd]	14.8[aabbccddee]	13.0[aabbccddee]
Musical[3]	18.1	21.2[aa]	21.5[aa]	20.6[aa]	16.9[bbccdd]	14.9[aabbccddee]	15.0[abbccdd]

1. Unadjusted Mean 2. Adjusted for Demographics 3. Adjusted for Demographics and Period.

a = difference from pre-1916 significant at .05 level
aa = difference from pre-1916 significant at .01 level
b = difference from 1916-1925 significant at .05 level
bb = difference from 1916-1925 significant at .01 level
c = difference from 1926-1935 significant at .05 level
cc = difference from 1926-1935 significant at .01 level
d = difference from 1936-1945 significant at .05 level
dd = difference from 1936-1945 significant at .01 level
e = difference from 1946-1955 significant at .05 level
ee = difference from 1946-1955 significant at .01 level
f = difference from 1956-1965 significant at .05 level
ff = difference from 1956-1965 significant at .01 level

BEST COPY AVAILABLE

Table 4.2

Cohort Comparisons from 1982 and 1992 SPPA: Unadjusted Proportions, Proportions Adjusted for Demographics, and Adjusted for Demographics and Period.

	Pre-1916	1916-25	1926-35	1936-45	1946-55	1956-65	1966-75
Jazz[1]	1.8	4.4[aa]	7.1[aabb]	8.4[aabbc]	12.2[aabbccdd]	15.5[aabbccddee]	12.8[aabbccddff]
Jazz[2]	5.8	6.8	8.0[aa]	8.4[aab]	11.6[aabbccdd]	13.5[aabbccddee]	8.7[aabeeff]
Jazz[3]	5.4	6.6	8.0[aa]	8.3[aab]	11.6[aabbccdd]	13.5[aabbccddee]	9.5[aabbeff]
Play[1]	7.2	11.6[aa]	14.6[aabb]	15.1[aabb]	13.8[aabbd]	11.8[aaccddee]	12.4[aacdd]
Play[2]	13.5	15.4[a]	16.2[aa]	14.1[cc]	11.1[aabbccdd]	9.6[aabbccdde]	8.7[aabbccdde]
Play[3]	13.5	15.4[a]	16.2[aa]	14.1[cc]	11.1[aabbccdd]	9.6[aabbccdde]	8.9[aabbccdde]
Art Museum[1]	10.9	18.5[aa]	22.1[aabb]	26.7[aabbcc]	28.6[aabbccd]	25.9[aabbccee]	28.5[aabbccf]
Art Museum[2]	21.4	24.0[a]	23.8[a]	24.5[aa]	24.3[aa]	22.9	23.7
Art Museum[3]	21.5	24.1[a]	23.8[a]	24.5[aa]	24.3[a]	22.9[d]	23.4
Books[1]	43.1	52.7[aa]	56.2[aabb]	59.7[aabbcc]	64.1[aabbccdd]	62.5[aabbccdd]	59.9[aabbcceef]
Books[2]	54.1	58.4[aa]	58.3[aa]	57.0[a]	58.9[aad]	60.3[aadd]	57.5[af]
Books[3]	54.3	58.5[aa]	58.3[aa]	57.0[a]	59.0[aad]	60.2[aadd]	57.1[f]

1. Unadjusted Mean 2. Adjusted for Demographics 3. Adjusted for Demographics and Period.

a = difference from pre-1916 significant at .05 level
aa = difference from pre-1916 significant at .01 level
b = difference from 1916-1925 significant at .05 level
bb = difference from 1916-1925 significant at .01 level
c = difference from 1926-1935 significant at .05 level
cc = difference from 1926-1935 significant at .01 level
d = difference from 1936-1945 significant at .05 level
dd = difference from 1936-1945 significant at .01 level
e = difference from 1946-1955 significant at .05 level
ee = difference from 1946-1955 significant at .01 level
f = difference from 1956-1965 significant at .05 level
ff = difference from 1956-1965 significant at .01 level

BEST COPY AVAILABLE

The Arts Participation of Cohorts Over Time

So far we have focused on the overall differences between cohorts, and have controlled for differences between 1982 and 1992 participation levels. In this chapter we compare the arts participation of each cohort in 1982 with its participation in 1992. First, in the unadjusted results we will see how cohorts altered their rates of attendance in response to a variety of life course influences as well as to aging effects. Second, we will control for life course factors and the demographic composition of the cohorts to examine how cohort aging per se influences participation. Only the six oldest cohorts are available for this over-time comparison since members of the 1966-1975 baby bust cohort were too young to be surveyed in the 1982 SPPA.

Table 5.1 presents data from the 1982 and 1992 SPPA for attendance of classical music performances, operas, and ballets. Unadjusted and adjusted proportions are presented for each cohort for both 1982 and 1992. In order to compare across cohorts and over time we also include significance tests for differences between proportions. The figures below the diagonal show the significance tests for differences between unadjusted proportions, while those above the diagonal show significance tests for differences between adjusted proportions. For example, to compare the significance of the changes in the level of attendance for the pre-1916 cohort we compare categories 1 and 2 (.068 and .097 in the unadjusted results and .114 and .168 in the adjusted results). We see that the test of significance of the difference between the unadjusted scores is .0525, and this is not quite significant at the conventional .0500 level of significance. Likewise, we see that the test of significance of the difference between the adjusted scores is .0002 and is thus clearly significant.

Classical Music In the unadjusted results for classical music we see that none of the cohorts altered their participation significantly between 1982 and 1992. Indeed there is no evidence that younger cohorts increase their rates of participation as they mature, in fact the two youngest cohorts actually have lower attendance rates in 1992 than in 1982. Controlling for life course influences and the demographic composition of the cohorts, we find fairly sizable reductions in participation between 1982 and 1992. First, every cohort, with the exception of the 1916-1925 and the 1936-1945 cohorts significantly decreased their attendance of classical music performances between 1982 and 1992, and the drop in participation for the 1936-1945 cohort comes close to conventional levels of statistical significance (.056).

Another interesting way of viewing these tables is to compare how two cohorts differ in their level of attendance at the same point in their life course. By comparing the results for the 1956-1965 cohort in 1992 and the 1946-1955 cohort in 1982, for example, we can see how the younger boomers compared with the older boomers when they were the same age. While these comparisons mix cohort effects with period effects, just as was found in chapter 2, most of the age group differences in participation between 1982 and 1992 are cohort effects and not period effects. In light of this, readers should note the lower participation rates of the younger cohorts compared to older cohorts at the same point in the life course. When we compare 1992 data from the 1956-1965 cohort with 1982 data from the 1946-1955 cohort, it appears that the young baby boomers in 1992 lag significantly behind the participation rates of the older boomers at the same point in the life course. In turn, these older boomers fail to match the participation rates of the 1936-1945 cohort when they were the same age.

These results are significant in both the adjusted and unadjusted results, and therefore cannot be explained by demographic or life course differences between these cohorts. In the unadjusted results, the 1936-1945 cohort participates at a higher rate than the 1926-1935 cohort when they were at the same point in the life course, however controls for life course and demographic factors reverse this relationship. Similarly the 1926-1935 cohort attended classical music performances at a higher rate at in 1992 compared to the 1916-1925 cohort in 1982 (though the relationship is not significant at conventional levels), however controls for demographic composition and life course factors elevates the participation of the 1916-1925 cohort over that of the 1926-1935 cohort (and this difference is statistically significant). In contrast, controls for demographic composition and life course factors erase the difference between rates of classical music attendance between the 1916-1925 cohort in 1992 and the pre-1916 cohort in 1982.

Generally, the findings for cohorts over time show that true aging effects on classical music attendance are only evident in the oldest cohort, which significantly decreases its participation even after controls. Also younger cohorts are not maturing into classical music attendance, and there is substantial evidence that successive cohorts, especially the baby boom cohorts, are less and less likely to attend classical music performances.

Opera The over-time results for opera are less vivid. Changes across cohorts between 1982 and 1992 are minimal in both the unadjusted and adjusted results. The only clear changes are a significant increase in the participation among the young baby boomers (the 1956-1965 cohort) in the unadjusted results and a significant decrease in attendance in the oldest cohort.

decreased their attendance. As we noted in Chapter 3, some of this shift may have been a period effect rather than an aging effect. Since there is no reason to suspect that as cohorts reach middle age they decrease their participation, these shifts seem unlikely to be the result of aging, and are more likely attributable to a cohort-specific period effect. It may be that the early 80s atheleticism of Baryshnikov was especially attractive to many of the older baby boom and World War Two cohorts. The remaining shifts over time for the cohorts are insignificant.

Looking at how the cohorts compare at similar ages, we find that unadjusted rates of ballet attendance are approximately equal for adjacent cohorts. The 1916-1925 cohort in 1992 is found to have somewhat higher ballet patronage than the pre-1916 cohort in 1982, however this is the only difference between different cohorts when they were at the same age that approaches statistical significance in the unadjusted results. Controlling for life course events and demographic composition we find that the older baby boom cohort (1946-1955) in 1992 is not keeping pace with the participation of the 1936-1945 generation in 1982. Further, the 1936-1945 generation in 1992 is outmatched by the rates of ballet attendance set by the 1926-1935 cohort in 1982. (At .0527, this difference approaches conventional levels of statistical significance).

In general, changes in ballet attendance are slight. Cohort comparisons at similar ages reveal that the older baby boom and World War II cohorts had lower participation in 1992. Further, these two cohorts failed to match the 1982 participation of their adjacent older cohorts when compared at the same age. As noted above, these changes in cohorts, however, are more likely attributable to period effects than to the aging of cohorts. So it is

impossible to predict at this time whether the ballet attendance of these cohorts will rebound.

Musicals Table 5.2 presents the unadjusted and adjusted proportions for attendance at musicals, jazz concerts, and theatrical plays. Looking at the unadjusted results for musicals we see that attendance is significantly down for the 1916-1925 cohort and the pre-1916 cohort. While none of the other cohorts significantly shifted its attendance rate in the unadjusted results, every cohort shows a decline in attendance at musicals. In the adjusted proportions we find that controls for demographic composition of cohorts and life course events reveal significant declines in attendance. Again, since there is no reason to suspect that the aging of younger cohorts leads to a reduction in attendance at musicals, we interpret these widespread declines in attendance at musicals to period effects rather than to aging in cohorts.

Comparing cohorts at similar points in the life course reveals several instances where the participation rates of younger cohorts in 1992 do not match the rates posted by the next older cohort in 1982. In the unadjusted results, the 1956-65 cohort does not attain the rate of the 1946-1955 cohort, and neither do the older boomers attain the 1982 rate of the 1936-1945 cohort. These results for the younger cohorts hold up after controls for life course and demographic influences. In the adjusted results, the 1935-1946 cohort's participation in 1992 is found to be significantly lower than the participation of the 1926-1935 cohort in 1982. Further, in 1992 the 1926-1935 cohort does not equal the attendance of the 1916-1925 cohort in 1982.

It is very clear that reported attendance at musicals is down. The consistent direction of changes in participation across all cohorts strongly

suggests that there is a strong period effect driving these changes rather than their being age related shifts. It is hard to say how much cohort comparisons at similar points in the life course are affected by period effects which inflate rates of participation in the 1982 data. Given the patterns of association and the magnitude of the differences within cohorts between these two periods, we think most of these differences are period effects.

Jazz Table 5.2 shows that the only significant changes over time occur for the two youngest cohorts. The initially high attendance at jazz concerts by the youngest cohort declined significantly between 1982 and 1992, and this result remains when controls for demographic composition and life course events are taken into account. If we take the position that the very high jazz attendance rates of this youngest generation were a function of age, then this decline could be seen as an expected effect of aging, with the cohort maturing <u>out of</u> jazz attendance. The older baby boom cohort is also found to significantly decrease their attendance of jazz performances once statistical controls are introduced. Both differences may be interpreted as aging effects. However, this difference could also be interpreted as a period effect which impacts primarily on the youngest cohorts.

The cohort comparisons at similar ages reveal that the older boomers were significantly more likely to attend jazz shows in 1992 than were members of the 1936-1945 cohort in 1982. In the unadjusted results the 1936-1945 cohort in 1992 is shown to have significantly more jazz patrons than the 1926-1935 cohort in 1982, when they were of comparable age. Before controls for demographic composition and life course events, the 1926-1935 cohort is found to

exceed the participation of the 1916-1925 cohort when they were of comparable age. Also until controls are introduced, the 1916-1925 cohort is found to have higher jazz attendance than the pre-1916 cohort when compared at the same point in the life course. This linear patterning of differences is reflective of a cohort effect on jazz participation, with each succeeding younger cohort being more likely to choose to attend jazz performances than its predecessor.

It is likely that some combination of aging and period effects are at work for jazz performance among the youngest two cohorts. Jazz may have been particularly attractive to the baby boom cohorts in the early 1980s, or specific shows may have brought in large numbers at that time. The growth of jazz-rock fusion may have influenced participation rates for the younger cohorts. Yet the decline between 1982 and 1992 may also be seen as an aging effect, with the baby boomers beginning to mature out of jazz. Clearly the cohort comparisons suggest that even if these cohorts are maturing away from jazz, the future prospects for jazz are good because each of the younger cohorts exceeded their elders' rates of jazz attendance when compared at the same age.

Plays In the unadjusted proportions, Table 5.2 shows that attendance at theatrical plays increased significantly for the 1946-1955 cohort, however no significant changes occurred for other cohorts in the unadjusted results. In the adjusted results, we find that controls for demographic composition and life course factors reveal a significant decline in participation in the oldest cohort. This decline is most likely the result of aging. Controls for demographic composition and life course factors eliminate the statistical significance of the increase in participation for the 1946-1955 cohort.

for art museums show that before controls for life course events and demographic factors, the two baby boom cohorts significantly increased attendance at art museums between 1982 and 1992, and the finding remains significant for the 1956-1965 cohort when controls for life course and demographic factors are introduced. These results could reflect an aging effect in the younger cohorts, with young people maturing into attendance. However, it could instead reflect a period effect that influences only the younger cohorts. The unadjusted results also show that the 1926-1935 cohort had significantly higher museum attendance in 1992 than in 1982, though controls for demographic and life course variables removes the significance of this difference. In the adjusted proportions an aging effect on participation is evident for the oldest cohort who reduced their participation significantly between 1982 and 1992.

Comparing cohorts matched in age, we find that before controls for demographic composition and life course events are introduced, the 1956-1965 generation in 1992 significantly exceeds the museum attendance proportion for the 1946-1955 cohort in 1982. Before statistical controls the 1946-1955 cohort is shown to have significantly more museum attenders compared to the 1936-1945 cohort when compared at the same age. In fact, every cohort significantly exceeds the participation of the next oldest cohort of ten years earlier. Although the unadjusted differences are strong, controls for demographic composition and life events eliminate these cohort differences. Hence, museum attendance differences between the cohorts are a function of the demographic composition of the cohorts.

Art museum attendance is down among the oldest cohort, and this can largely be explained by aging effects. Further, there is some evidence that

younger cohorts may be maturing into museum attendance. However, we cannot rule out the possibility that period effects are motivating the increases in museum patronage among the younger cohorts. Finally differences between cohorts compared at the same age were found to result from life course and demographic influences rather than from enduring differences between adjacent cohorts.

Novels Lastly, Table 5.3 presents the unadjusted and adjusted cohort comparisons over time for reading literary novels. The results are much like those for attendance at art museums, with the youngest cohorts charting significant increases in readership between 1982 and 1992. Indeed, between 1982 and 1992 all of the cohorts born after 1926 significantly increased the proportion of members who read a novel. Controls for demographic composition and life course factors reduce most of the increases to statistical insignificance. However, the 1926-1935 cohort does chart increases in readership which remain significant in the presence of controls. In contrast, both the unadjusted and adjusted proportions show that the proportion of members of the pre-1916 cohort who read a novel decreased significantly between 1982 and 1992.

Comparing the cohorts at similar ages we find that the young baby boom cohort (1956-1965) has higher readership rates than the older baby boom cohort (1946-1955). The latter cohort was also found to read more than the 1936-1945 cohort when compared at the same age. In the unadjusted results, we find that the 1916-1925, 1926-1935, and 1936-1945 cohorts outread their respective adjacent elder cohort when compared at the same age. However, these cohort differences are mostly a function of life course and demographic differences

between the cohorts.

These results clearly show that reading declines because of aging in the oldest cohort. Problems with eyesight and other health concerts are very likely having an impact on the number of people born prior to 1916 who can enjoy reading. Overall, however, novel reading is on the increase, primarily because of life course changes in the earlier cohorts which increase the proportion of readers, and large increases in readership in the two baby boom cohorts reveal significantly higher levels of readership than were present in the preceding cohorts at a equivalent age.

Table 5.1

Arts Participation of Cohorts Over Time

Classical Music

YR Cohort	Unadj.	Adj.	#	1	2	3	4	5	6	7	8	9	10	11	12
92 lt 16	6.8	11.4	1	.	.0002	.0003	.0005	.0767	.0003	.0331	.0005	.2220	.9535	.0015	.2739
82 lt 16	9.7	16.8	2	.0525	.	.7199	.8410	.0205	.9344	.0646	.9307	.0001	.0001	.0001	.0001
92 16-25	14.3	17.2	3	.0001	.0001	.	.5979	.0167	.7723	.0468	.6669	.0001	.0001	.0001	.0001
82 16-25	12.5	16.6	4	.0001	.0063	.1310	.	.0280	.7653	.0802	.9066	.0001	.0001	.0001	.0001
92 26-35	14.0	14.2	5	.0001	.0001	.8395	.1700	.	.0128	.6316	.0200	.0001	.0110	.0001	.0001
82 26-35	14.6	16.9	6	.0001	.0001	.7859	.0335	.5998	.	.0387	.8512	.0001	.0001	.0001	.0001
92 36-45	17.0	14.8	7	.0001	.0001	.0254	.0001	.0098	.0197	.	.0560	.0001	.0012	.0001	.0001
82 36-45	17.0	16.7	8	.0001	.0001	.0174	.0001	.0055	.0105	.9749	.	.0001	.0001	.0001	.0001
92 46-55	13.9	9.5	9	.0001	.0001	.7608	.1434	.9308	.4845	.0028	.0010	.	.0246	.0010	.8090
82 46-55	13.7	11.5	10	.0001	.0001	.6165	.1696	.7763	.3246	.0006	.0001	.8225	.	.0001	.0293
92 56-65	10.4	6.5	11	.0129	.4571	.0007	.0304	.0007	.0001	.0001	.0001	.0001	.0001	.	.0002
82 56-65	11.5	9.8	12	.0009	.0435	.0126	.3008	.0153	.0005	.0001	.0001	.0063	.0053	.1796	.

Opera

YR Cohort	Unadj.	Adj.	#	1	2	3	4	5	6	7	8	9	10	11	12
92 lt 16	1.8	2.7	1	.	.0054	.0308	.0099	.1620	.0135	.2662	.1526	.5792	.5811	.3101	.0714
82 lt 16	2.8	5.0	2	.1904	.	.5885	.8222	.0919	.7098	.0338	.0560	.0001	.0001	.0001	.0001
92 16-25	3.5	4.6	3	.0385	.2453	.	.7256	.3181	.8213	.1656	.2733	.0003	.0002	.0001	.0001
82 16-25	3.6	4.8	4	.0215	.1474	.9339	.	.1267	.8752	.0439	.0711	.0001	.0001	.0001	.0001
92 26-35	4.1	3.9	5	.0046	.0269	.3879	.3707	.	.1573	.6902	.9787	.0052	.0043	.0007	.0001
82 26-35	4.0	4.8	6	.0046	.0253	.4687	.4526	.8149	.	.0542	.0848	.0001	.0001	.0001	.0001
92 36-45	4.4	3.7	7	.0010	.0043	.1703	.1375	.6123	.4181	.	.6743	.0124	.0103	.0017	.0001
82 36-45	3.9	3.9	8	.0063	.0366	.5684	.5673	.6782	.8404	.3124	.	.0011	.0003	.0001	.0001
92 46-55	3.5	2.3	9	.0263	.1840	.9517	.8641	.2820	.3396	.0903	.4387	.	.9850	.4384	.0398
82 46-55	2.9	2.3	10	.1406	.8825	.2534	.1378	.0211	.0171	.0024	.0257	.1749	.	.3803	.0182
92 56-65	3.1	1.9	11	.0915	.6063	.4350	.3042	.0619	.0628	.0111	.0896	.3758	.6667	.	.1777
82 56-65	2.1	1.2	12	.6445	.1538	.0143	.0023	.0002	.0001	.0001	.0001	.0027	.0665	.0328	.

Ballet

YR Cohort	Unadj.	Adj.	#	1	2	3	4	5	6	7	8	9	10	11	12
92 lt 16	1.9	3.7	1	.	.0778	.1068	.0682	.2464	.2033	.9624	.0592	.5400	.4076	.9422	.5205
82 lt 16	2.4	5.4	2	.6101	.	.9955	.8839	.4944	.4959	.0160	.7843	.0008	.1768	.0114	.0003
92 16-25	3.8	5.4	3	.0618	.0579	.	.8975	.5472	.5671	.0320	.8109	.0031	.2515	.0253	.0024
82 16-25	3.7	5.5	4	.0503	.0339	.9399	.	.4048	.3816	.0078	.8893	.0002	.1103	.0050	.0001
92 26-35	4.6	4.9	5	.0050	.0012	.2781	.1882	.	.9315	.0991	.3349	.0114	.5880	.0800	.0090
82 26-35	3.9	5.0	6	.0267	.0115	.8262	.7278	.3030	.	.0527	.2914	.0029	.4507	.0381	.0016
92 36-45	4.7	3.7	7	.0026	.0003	.1935	.1142	.8485	.1974	.	.0041	.4044	.1872	.9714	.3808
82 36-45	5.6	5.6	8	.0001	.0001	.0069	.0010	.1100	.0025	.1457	.	.0001	.0499	.0013	.0001
92 46-55	5.1	3.2	9	.0004	.0001	.0615	.0220	.4711	.0458	.5901	.3174	.	.0121	.3697	.9733
82 46-55	5.4	4.5	10	.0001	.0001	.0119	.0017	.1787	.0044	.2365	.6817	.5005	.	.1020	.0054
92 56-65	5.4	3.7	11	.0001	.0001	.0154	.0030	.1971	.0072	.2579	.7032	.5230	.9962	.	.3168
82 56-65	4.1	3.1	12	.0111	.0018	.5830	.4478	.4451	.6939	.3018	.0036	.0732	.0061	.0107	.

BEST COPY AVAILABLE

Table 5.2

Arts Participation of Cohorts Over Time

Musicals

YR Cohort	Unadj.	Adj.	#	1	2	3	4	5	6	7	8	9	10	11	12
92 lt 16	7.7	13.8	1	.	.0003	.0071	.0001	.0030	.0001	.0130	.0001	.6338	.0141	.7031	.2468
82 lt 16	11.5	20.0	2	.0264	.	.3689	.0180	.5383	.0139	.1847	.0948	.0001	.0955	.0001	.0003
92 16-25	15.6	18.8	3	.0001	.0027	.	.0038	.7758	.0028	.7352	.0204	.0026	.6015	.0001	.0280
82 16-25	18.5	22.6	4	.0001	.0001	.0318	.	.0057	.9105	.0003	.4875	.0001	.0001	.0001	.0001
92 26-35	19.2	19.2	5	.0001	.0001	.0131	.5850	.	.0037	.4995	.0283	.0003	.3631	.0001	.0063
82 26-35	21.1	22.8	6	.0001	.0001	.0001	.0186	.1149	.	.0001	.3995	.0001	.0001	.0001	.0001
92 36-45	22.1	18.3	7	.0001	.0001	.0001	.0028	.0263	.4064	.	.0021	.0023	.8511	.0001	.0355
82 36-45	22.8	21.9	8	.0001	.0001	.0001	.0001	.0026	.1088	.5321	.	.0001	.0001	.0001	.0001
92 46-55	19.8	14.6	9	.0001	.0001	.0014	.2429	.6201	.2152	.0482	.0039	.	.0006	.1529	.2628
82 46-55	20.6	18.1	10	.0001	.0001	.0001	.0397	.2176	.5916	.1659	.0201	.4097	.	.0001	.0141
92 56-65	16.8	13.1	11	.0001	.0001	.3420	.1250	.0504	.0001	.0001	.0001	.0045	.0001	.	.0064
82 56-65	17.0	15.8	12	.0001	.0001	.2626	.1471	.0585	.0001	.0001	.0001	.0046	.0001	.8599	.

Jazz

YR Cohort	Unadj.	Adj.	#	1	2	3	4	5	6	7	8	9	10	11	12
92 lt 16	1.6	4.5	1	.	.3211	.1531	.1356	.0180	.0160	.0125	.0073	.0001	.0001	.0001	.0001
82 lt 16	1.8	5.8	2	.8899	.	.4763	.4281	.0430	.0279	.0264	.0091	.0001	.0001	.0001	.0001
92 16-25	4.5	6.6	3	.0365	.0076	.	.9656	.2537	.2482	.1892	.1280	.0009	.0001	.0001	.0001
82 16-25	4.3	6.5	4	.0372	.0044	.8276	.	.1728	.1357	.1123	.0506	.0001	.0001	.0001	.0001
92 26-35	7.9	7.8	5	.0001	.0001	.0016	.0001	.	.9302	.8706	.7461	.0210	.0001	.0005	.0001
82 26-35	6.6	7.8	6	.0001	.0001	.0384	.0072	.1431	.	.7840	.6217	.0064	.0001	.0001	.0001
92 36-45	9.5	8.0	7	.0001	.0001	.0001	.0001	.1122	.0010	.	.8744	.0243	.0001	.0005	.0001
82 36-45	7.7	8.2	8	.0001	.0001	.0013	.0001	.7616	.1759	.0338	.	.0187	.0001	.0001	.0001
92 46-55	12.5	10.1	9	.0001	.0001	.0001	.0001	.0001	.0001	.0009	.0001	.	.0127	.1424	.0001
82 46-55	12.1	12.0	10	.0001	.0001	.0001	.0001	.0001	.0001	.0021	.0001	.5745	.	.3247	.0003
92 56-65	13.0	11.3	11	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.4983	.1851	.	.0001
82 56-65	17.5	14.6	12	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.

Plays

YR Cohort	Unadj.	Adj.	#	1	2	3	4	5	6	7	8	9	10	11	12
92 lt 16	5.2	9.4	1	.	.0004	.0001	.0003	.0001	.0001	.0042	.0033	.2690	.3772	.9859	.9987
82 lt 16	7.8	14.6	2	.0724	.	.2060	.8284	.2830	.1230	.5136	.4513	.0008	.0001	.0001	.0001
92 16-25	12.7	16.0	3	.0001	.0001	.	.2799	.8289	.9664	.0761	.0576	.0001	.0001	.0001	.0001
82 16-25	11.0	14.8	4	.0001	.0015	.1278	.	.3647	.1605	.3753	.3026	.0002	.0001	.0001	.0001
92 26-35	15.1	15.8	5	.0001	.0001	.0606	.0002	.	.7649	.0946	.0695	.0001	.0001	.0001	.0001
82 26-35	14.2	16.1	6	.0001	.0001	.1844	.0007	.4397	.	.0289	.0112	.0001	.0001	.0001	.0001
92 36-45	16.2	13.9	7	.0001	.0001	.0043	.0001	.3307	.0585	.	.9744	.0070	.0017	.0001	.0001
82 36-45	14.4	13.8	8	.0001	.0001	.1448	.0003	.5038	.8931	.0711	.	.0028	.0002	.0001	.0001
92 46-55	15.0	11.1	9	.0001	.0001	.0416	.0001	.9770	.3948	.2618	.4621	.	.6797	.0708	.0622
82 46-55	12.9	10.7	10	.0001	.0001	.8476	.0261	.0322	.1277	.0006	.0865	.0133	.	.1170	.0944
92 56-65	12.5	9.4	11	.0001	.0001	.8255	.1041	.0130	.0534	.0002	.0341	.0046	.5828	.	.9723
82 56-65	11.2	9.4	12	.0001	.0001	.1490	.8037	.0001	.0004	.0001	.0001	.0001	.0223	.1143	.

CHAPTER 6 January 20, 1995

Cohort Arts Consumption via the Media

The trends in art participation pointed out in previous chapters beg the question of whether or not some of the losses in attendance at events - for example among the elderly and the young -- are made up for through arts consumption via other media. To examine the possibility of media substitution, and cohort differences in art consumption via media, we will compare cohorts over time as we did in chapter 5. First, we will examine consumption of classical music, opera, ballet, musicals, jazz, plays, and visual arts via television. Second, we look at consumption of classical music and opera on the radio. Finally, we examine listening to classical music and opera on recordings.

Arts Consumption via Video

Those with too little time and money, or with concerns for safety and/or health may choose to view arts on video rather than attend in person. However, there also may be cohort variations in video participation. The advent of the VCR and cable television have certainly increased the variety of art offerings available to people, however it is possible that the full range of video options are most accessible to younger cohorts who have grown up in the TV Era and are most likely to have mastered the technologies which allows them to view what they want.

To asses the extent of arts participation via the media, test for substitution effects in the older cohorts, and the video-arts preferences of the younger cohorts, we will begin by discussing cohort differences and then track the cohorts over time to observe changes in video consumption for each of the art forms.

Classical Music Table 6.1 presents the adjusted and unadjusted proportions for each cohort for video consumption of classical music and opera. Looking first at classical music, we find that the unadjusted means reveal a curvilinear pattern of video consumption. However the adjusted means find video consumption of classical music to be a more nearly linear function of age, with the older cohorts being much more likely to consume classical music via video, when compared to the post-1936 cohorts. Further, the 1956-1965 cohort has significantly lower video viewing rates than prior cohorts, and this finding holds for both the adjusted and the unadjusted proportions.

Looking specifically at possibility of media substitution, we find that unadjusted rates of video consumption of classical music reveal a substantial increase for the oldest cohort between 1982 and 1992, though our confidence in this difference is relatively weak (p=.06). The significance of this finding disappears with controls, however it should be remembered that the adjusted consumption of the pre-1916 cohort was very high. The 1936-1945 cohort also significantly increased its consumption of classical music via video between 1982 and 1992, and this finding remains significant after controls for demographic and life course factors. Finally, we find that the 1956-1965 cohort, which had by far the lowest rates of video classical music consumption, made significant increases in consumption between 1982 and 1992, though the significance of this finding waned when controls for demographic composition and life course factors were introduced.

The results seem to indicate the video consumption of classical music is very high in the cohorts which show some declines in attendance of live performances. This seems especially true for the oldest cohorts, which seemed poised for such substitution given their high participation rates in 1982.

Younger cohorts are also increasing their consumption of classical music via video. Whether or not this will yield increases in actual attendance by these younger cohorts remains to be seen, but it appears that video may help the younger groups mature into classical music audiences.

Opera Table 6.1 reveals that cohort variations in opera video consumption are fairly linear, peaking in the 1926-1935 cohort and leveling off. While the audience for live opera performances comes close to fitting the "greying thesis," the audience on video is very grey indeed. The pre-1916 cohort is nearly two and a half times as likely to have viewed an opera on video compared to the young baby boom cohort in 1982, and almost twice as likely in 1992. The 1946-older baby boom cohort also has low opera viewership -- having significantly lower rates of viewing compared to all older cohorts. Further, controls for demographic composition and life course factors exacerbate the differences between the oldest and youngest cohorts.

Looking at changes in video consumption of opera over time we find some evidence that the youngest cohorts are maturing into video consumption. Both the 1946-1955 cohort and the 1956-65 cohort significantly increased their consumption of opera via video between 1982 and 1992. However, controls for demographic and life course factors removes the significance of this change. The middle aged cohorts are relatively stable in their video consumption, however the oldest cohort's increase in unadjusted video consumption nearly reaches significance (p=.115). Thus, compared to classical music, video viewer rates are much lower for opera, and increases in video consumption are not as evident.

Recall from Chapter 2 that live opera attendance did not suffer from the rates of disengagement which musicals and classical music experienced. However, compared to classical music, opera does not seem to be increasing its video consumption. Opera did suffer participatory losses in the oldest cohort, and these losses are not accounted for by substitution. However, it could be that overall rates of opera viewership on video are the best indicator of substitution possibilities, rather than increases in these rates. For example, the significant decline in participation among the pre-1916 cohort may be absorbed among the nearly 17% of this oldest cohort who view opera on video (even though the 17% figure is not significantly higher than the 13.6% total for 1982). Since video viewership is higher than participation, substitution can take place without increases in video viewership, as former participants who also watched operas on video disengage from active attendance.

Ballet Table 6.2 presents the proportions in each cohort for viewing ballet on video in 1982 and 1992. Looking first at the unadjusted differences between cohorts we find that the patterns for ballet fit the curvilinear pattern found for classical music. As with classical music, the highest rates of ballet video viewership are in the 1926-1935 cohort. Also, the eldest cohort has significantly higher rates of video ballet viewership compared to the youngest cohort (at least in 1982). Generally, cohort differences are not as large for ballet as they were for either classical music or opera. Controls for demographic composition and life course factors produce a much more linear pattern of video viewing of ballet. Statistical controls widen the gulf between the two baby boom cohorts and those that preceded them.

Indeed, in the adjusted results the baby boom cohorts show significantly lower rates of ballet viewing via video.

Looking at changes in video consumption of ballet between 1982 and 1992, we find that while the oldest cohort increased its consumption, the change is not significant. The unadjusted results show significant increases in video consumption of ballets for the 1926-1935, 1936-1945, 1946-1955, and 1956-1965 cohorts. This consistent pattern of increasing consumption in the younger cohorts should be comforting to supporters, especially given the slight declines evident in attendance (see chapter 2). However, the introduction of controls for demographic composition and life course factors mitigates the significance of these findings, though the increases found for the young baby boomers remain significant at conventional levels, and the increases among the older boomers approach statistical significance (p=.064).

Video consumption of ballet is somewhat higher than consumption of opera, though not as high as classical music viewership. What is remarkable is that compared to opera viewership, the video audience for ballet is much younger, and there is evidence of significantly increasing video viewership of ballet among the younger cohorts. Ballet did not suffer from disengagement in the oldest cohorts (see chapter 2), and hence substitution is a less important issue for ballet. What seems more important is the apparent maturation of younger cohorts into ballet through video viewing.

Musicals Table 6.2 also presents the unadjusted and adjusted figures for viewing musicals on video by cohort in 1982 and 1992. Overall, the pattern of video consumption of musicals is much more flat than the previously considered disciplines. There is some curvilinearity in the results, with the 1926-1935

cohort once again being the peak viewers. But only the cohorts with the highest (1926-1935) and lowest (1956-1965) rates of viewership differ significantly and substantially from other cohorts. In 1982 the difference between the oldest and the youngest cohort is very small and insignificant. Controls for demographic composition and life course factors increase cohort differences, but do not produce a different pattern of results. Clearly, the video consumption of musicals is much higher in the older cohorts, and in 1992 there is an apparently widening gulf between the baby boom cohorts and those that precede them.

Further, for almost every cohort viewership is down in 1992. This is hardly evidence for substitution! If anything, the substantial declines in attendance at musicals noted earlier are being matched by declines in video consumption of musicals. Controls for demographic and life course factors do not make the story any brighter. The 1926-1935 cohort, which liked musicals the most, shows a significant decline in video consumption of musicals between 1982 and 1992, and this substantial decline is even stronger after statistical controls. Significant declines are evident among both baby boom cohorts, and these decreases are also more apparent after demographic and life course variables have been taken into account. Not only is disengagement among the oldest cohort not made up for by video substitution, the pre-1916 cohort shows a decrease in video consumption.

Comparing these results and those from chapter 2 it becomes evident that Americans are less interested in musicals than they were in 1982. Not only is attendance down at live musical performances, but video consumption of musicals is also down. Given the increases in availability through rentals of videocassette, and the availability of a wide array of classic musicals in

most video markets, this finding is particularly disturbing for those interested in the vitality of this art form.

Jazz Table 6.3 shows the unadjusted and adjusted proportions for viewing jazz performances on video. Cohort variations in video consumption of jazz reveal a pattern unlike that found for the other disciplines considered so far. First, in the unadjusted proportions, the older baby boom cohort is found to have the highest rate of consumption of jazz via video, and they are significantly higher than from all other cohorts with the exception of the pre-World War Two cohort. Controls for demographic composition and life course factors level video consumption almost completely, revealing almost identical rates of video consumption of jazz in all cohorts.

Looking at changes in jazz viewership on video between 1982 and 1992 we find that, unlike musicals, video consumption of jazz is generally stable or increasing. Indeed, the unadjusted results find that the 1936-1945, 1946--1955, and 1956-1965 cohorts significantly increased video consumption of jazz. Increases in other cohorts are not statistically significant, but they are considerable. Controls for demographic composition and life course factors eliminate the statistical significance of the increases in the two baby boom cohorts, however the increasing viewership in the 1936-1945 cohort remains significant.

Like ballet, jazz did not see a disengagement of participation among the oldest cohort (whose participation in jazz performances was quite low to begin with). However, younger cohorts significantly decreased attendance between 1982 and 1992. These decreases in attendance did not coincide with decreases in video consumption, as was the case with musicals. Hence, it appears that

younger cohorts are substituting video consumption of jazz for live attendance. Unlike musicals, jazz seems to be retaining its interest across cohorts, and the range of cohorts which consume jazz, especially on video, is quite large. While attendance at jazz concerts is much higher for younger cohorts, video consumption of jazz is very high even in the 1916-1925 cohort. Jazz music seems to be the music of all ages, but jazz concerts are productions for the young.

Plays At the center of Table 6.3 are the unadjusted and adjusted proportions from each cohort for video viewing of theatrical plays for both 1982 and 1992. Looking first at the cohort comparisons, the curvilinear pattern found for classical music and ballet is evident for theatrical plays as well. Peak viewership is for the 1926-1935 cohort, which has significantly higher consumption compared to any other cohort in both the unadjusted and adjusted results. In 1982, the youngest cohort has significantly higher rates of video consumption of plays compared to the pre-1916 cohort, though substantial declines in video consumption in the youngest cohort obliterate this difference for 1992. Controls for demographic and life course variables fail to change the overall pattern of consumption by cohort, although older cohort's deficits are mitigated somewhat by the controls.

Looking at changes between 1982 and 1992 we find much the same pattern for theatrical plays which we found for musicals--an alarmingly consistent decrease in video consumption. While declines in attendance of theatrical plays were not as severe as was the case for musicals, decreases in consumption on video are, if anything, greater for plays. In the unadjusted results, the 1926-1935, 1946-1955, and 1956-1965 cohorts are all found to have signifi-

cantly decreased their consumption of plays on video. Controls for demographic and life course factors not only fail to wipe out these declines, but they add the 1935-1946 and the pre-1916 cohorts to the list of cohorts experiencing significant decreases. The magnitude of the declines is impressive. In the adjusted results the 1926-1935, 1946-1955, and 1956-1965 cohorts all chart declines in consumption of more than 10%. As with musicals, the loss of so many consumers in the cohort with the highest rate of consumption (1926-1935) is particularly notable. And, not only are the eldest consumers not substituting video for actual attendance, they are decreasing video consumption as well.

Much like the results from musicals, the findings for theatrical plays suggest that interest is on the decline. There is no evidence that the slight decreases in attendance (see chapter 2) are being offset by increases in video consumption. Quite the contrary, video consumption of theatrical plays is down markedly. These drastic declines are evident in virtually every cohort, and they hold up after controls for other factors which might have explained the decreases. These general declines may be due not to a change in audience desires but to a decreased supply of plays on television over the decade.

Visual Arts Finally, Table 6.3 presents the unadjusted and adjusted proportions who view visual arts on television. In the cohort comparisons, some curvilinearity is apparent. In the unadjusted proportions viewership of visual arts on video is highest among the 1936-1945 and 1946-1955 cohorts for the 1992 data, however it peaks in the 1926-1935 cohort in 1982. Strong increases in video consumption among the younger cohorts between 1982 and 1992 change the overall comparisons substantially. What is clear is that overall

rates of video viewing of visual arts are consistently high across all cohorts, and there is no great decline among either the oldest or youngest cohorts (although the oldest cohort has the lowest unadjusted proportion for both 1982 and 1992). Controls for demographic composition and life course factors help to further level the rates across cohorts.

Changes in video viewing of visual arts between 1982 and 1992 are a stark contrast to those found for theatrical plays and musicals. Viewership is uniformly increasing in every cohort, with gains exceeding 10% for the 1936-1945, 1946-1955 and 1956-1965 cohorts in the unadjusted proportions. Even after statistical controls, the increases in video consumption of visual arts among the baby boom cohorts approaches 10% (1946-1955) or exceeds that amount (1956-1965). The unadjusted results find statistically significant increases in the 1926-1935, 1936-1945, 1946-1955, and 1956-1965 cohorts. Controls for demographic composition and life course factors have little effect on the significance of these findings, although the increase for the 1926-1935 cohort is reduced to slightly over conventional statistical significance levels ($p=.055$). There is no real evidence of substitution for the oldest cohort. They also increased viewership of visual arts on video, but this increase is not statistically significant.

Attendance at art museums showed uniform increases across almost all cohorts, and only the pre-1916 cohort was found to have decreased attendance. Given these increases in attendance, there is little reason to consider increases in video viewing as participatory substitution. However, the very strong increases in viewership suggest a uniformly increasing interest in the visual arts, and video viewership may lead to museum going. What is notable is that actual attendance at art museums is nearly as high as viewership on

video (in contrast to the larger audiences on video for all other arts forms). With increasing interest in the visual arts, it seems likely that more people would watch video programs on the visual arts if they were available.

Consumption of Classical Music and Opera via Radio[1]

Like television, radio can whet the appetite for the arts, and it can provide a substitute for live participation in the performing arts. In this section we will examine cohort differences in consumption of classical music and opera via radio, and changes between 1982 and 1992. Parallel to our review of video viewing we will examine the proportion of individuals in each cohort who reported listening to classical music or opera on the radio in the last year for both 1982 and 1992. Our results report the unadjusted proportions for each cohort and the proportion when adjustments are made for the demographic composition of the cohort and life course factors experienced by members of the cohorts.

Classical Music Table 6.4 presents the unadjusted and adjusted results for the listenership of classical music via radio by cohort in 1982 and 1992. In the unadjusted results, a curvilinear pattern of radio listening by age appears. Radio consumption of classical music peaks in the 1936-1945 cohort, though both the 1926-1935 and 1946-1955 cohorts have nearly as many listeners (the 1926-1935 cohort matches the 1936-1945 cohort in 1982). In 1982, the 1956-1965 cohort has the fewest classical music radio listeners, significantly fewer than all other cohorts except the pre-1916 cohort. However incredible gains by the young baby boom cohort between 1982 and 1992 leave the pre-1916

cohort with the lowest listenership, differing significantly from all other cohorts in 1992 in the unadjusted results.

When controls for demographic composition and life course factors are taken into account we find that radio consumption of classical music in the oldest cohort matches that of most of the younger cohorts, indeed in 1982 the pre-1916 cohort has the highest radio listenership rate. In 1992 adjusted participation peaks in the 1926-1935 cohort. Thus, taking demographic and life course variables into account creates a significant divide between the two baby boom cohorts and the older cohorts (though the significance of the difference between the older boomers and the 1936-1945 cohort is marginal in 1982).

Looking at changes between 1982 and 1992 we find that listening to classical music on the radio has become more popular in every cohort. The unadjusted results show that radio consumption of classical music has increased significantly in all cohorts. Indeed, the proportion of the 1956-1965 cohort who listened to classical music more than doubled between 1982 and 1992. Enormous increases in radio listening for both baby boom cohorts erased much of the deficit between them and the older groups. Indeed the older baby boomers are significantly higher in listenership than the 1916-1925 and pre-1916 cohorts in 1992, and the older boomers do not have significantly lower radio consumption rates than any other cohort. The smallest increase was for the pre-1916 cohort, with an increase of 5.3%. Controls for demographic composition and life course factors do not erase the significance of these gains.

Given the declines in attendance of classical music concerts between 1982 and 1992, the finding that cohorts are increasing consumption of classi-

cal music on radio seems to indicate a substitution of radio for participation. The extremely strong increases in the younger cohorts could be interpreted as evidence that these baby boomers are maturing into classical music, however their consumption via radio is not, or not yet, translating into attendance at live concerts. That older cohorts are also increasing consumption of classical music via radio is heartening, however the pre-1916 cohort is not making up for its significantly abated classical music attendance rates by substituting radio listening. We do note, however, that since radio listening is more popular than actual attendance, substitution can occur without observed increases in radio consumption.

Opera Table 6.4 also presents the unadjusted and adjusted proportions for radio listenership of opera for each cohort in 1982 and 1992. As was the case with other media, radio consumption of opera is more prevalent in the older cohorts. Opera radio consumption is highest in the 1926-1935 cohort in both survey years. The two baby boom cohorts and the 1936-1945 cohort have the lowest rates of opera listening in 1982, significantly lower than the 1926--1935 cohort in both the unadjusted and adjusted results. Because of the lower overall rates of listening to opera, significant differences are more difficult to detect, however it is clear that the oldest cohort has significantly higher rates of listening compared to the younger baby boom group (in both 1982 and 1992). Controls for demographic and life course variables accentuate the age of opera radio listeners even more. Opera radio listening increases almost linearly across cohorts when statistical controls are taken into account. The gulf between baby boomers and other cohorts is apparent, though the World War II cohort also has few opera listeners.

We find increases in consumption of opera on the radio between 1982 and 1992, but they are not nearly as large for opera as they were for classical music. We do find significant increases in opera radio listening for the 1916-1925, 1936-1945, and 1946-1955 cohorts in the unadjusted proportions. Controls for demographic and life course variables erase the significance of the increase for the 1946-1955 cohort, though the other findings remain significant. The largest increase in opera listening via radio was for the 1936-1945 cohort, which more than doubled its rate of listenership between 1982 and 1992. Increases in opera listening on the radio are also apparent in the other cohorts, but these changes are substantively small and not statistically significant.

Listening to opera on the radio is much more popular than actual attendance, and there is some evidence that opera via radio is becoming more popular. Opera did not see the overall declines in participation which other disciplines experienced (see chapter 2), however there was a significant loss of participation among the pre-1916 cohort. The oldest cohort does not seem to be substituting radio listening for actual attendance at operas, however many of those who used to attend and listen, now just listen to opera on the radio.

Consumption of Classical Music and Opera via Recorded Music

The consumption of recorded music is yet another possible medium which could be substituted for live attendance. To round out our examination of cohort differences and changes in consumption of art forms via other media, we examine cohort variations and changes in listening to classical music and opera on records, tapes, or compact disks. Once again we present unadjusted

and adjusted proportions of listeners in each cohort for both the 1982 and 1992 SPPA.

Classical Music Table 6.5 shows that consumption of classical music recordings is actually highest in the older baby boom cohort in both 1982 and 1992, which has significantly higher rates of listening than the pre-1916 and 1956-1965 cohorts in 1982. They outdistance these two cohorts as well as the 1916-1925 and 1926-1935 cohorts in 1992 because of declines in listening to classical music recordings in these older cohorts. The 1936-1945 cohort also has very high rates of listening to classical music recordings. Audiences for classical music recordings are lowest in the pre-1916 cohort, which has significantly lower rates of listening compared to all other cohorts with the exception of the younger baby boomers, until controls for demographic composition and life course factors are taken into account. The adjusted results help to even disparities between the oldest cohorts and the middle cohorts. We also find that much of the distance between the older baby boomers and the older cohorts is accounted for by demographic and life course factors.

Looking at changes in consumption of classical music recordings between 1982 and 1992 we find that many of the older cohorts decreased consumption. The decline in listening was significant for the 1916-1925 cohort, though controls for demographic composition and life course factors minimize the significance of the finding (p=.103). In contrast, classical recordings became more popular with members of the younger baby boom cohort, and this increase is significant even after controls are introduced.

The strong levels of consumption of classical music recordings among the older baby boomers is encouraging, and suggests that they may substitute recordings for live participation (which is down between 1982 and 1992). The

younger baby boomers are also maturing into consumption of classical music through recordings, though this has yet to result in substantial changes in their attendance at live concerts. However, strong declines in classical music attendance among members of the pre-1916 cohort are not being made up for with increases in listening to recordings. The absolute declines in recording listenership among the older cohorts compared to the increases found for classical music radio suggest that recordings may not be the preferred medium for substitution for older Americans.

Opera The unadjusted proportions presented in Table 6.5 show that the audience for opera recordings is highest in the 1926-1935 cohort, followed closely by the 1916-1925 cohort. As with television and radio, the audience for opera recordings is older than for other art forms. Controls for demographic and life course factors only accentuate the age of the opera recorded music audience, creating a gulf between the 1926-1935 cohort and the younger cohorts which follow. Indeed, the adjusted results show a significant difference between the baby boom cohorts and the intermediate 1935-1946 cohort. While by 1992 many of the baby boomers have become avid listeners of classical music recordings, they eschew opera recordings, and are less likely to listen to opera recordings than all but the oldest cohort and the 1916-1925 cohort. Consumption of recorded opera is also low in the oldest cohort, which has the second lowest listenership rate in 1992.

Looking at changes in consumption of opera via recording between 1982 and 1992 we find a somewhat similar pattern of change to what we found for classical music -- fewer members of the older cohorts are listening to recordings while more members of the younger cohorts are listening. The

increase is significant for the 1946-1955 cohort and approaches significance for the 1956-1965 cohort (p=.089) until controls for demographic composition and life course variables are taken into account. The decline in opera listening on recordings found for the 1916-1925 cohort is significant, and remains significant after statistical controls. Further, controlling for demographic and life course variables, the decreases in opera listening rates for the pre-1916 cohort and for the 1926-1935 cohort approach conventional levels of significance (p=.053 and p=.070, respectively).

The pattern of increasing consumption of recordings for younger cohorts and decreasing consumption of recordings in older cohorts merits special attention since it was found for both classical music and opera. Changes in recording technology have led to changes in availability---with the advent of cassette tapes and now compact disks there is less available on vinyl records. Older Americans may not be purchasing updated equipment, and may simply switch to high fidelity FM radio listening which sound better than most LP recordings played on home equipment. Younger cohorts likely have newer equipment which allows them to record from radio or play the latest purchased or borrowed digital recordings. Again, substitution could be taking place for the older cohorts, but the pattern of results suggest that older Americans are more likely to choose the radio or video, rather than recorded music, as a substitute for participation.

Notes to Chapter 6

1. Classical music and opera are not, of course, the only performing arts. The reason they are focal in the discussion of the arts on radio is as follows. Musicals and plays are now seldom presented on the radio. Ballet music is sometimes presented on the radio, but only as part of the mix of classical music. Jazz is, of course, often presented on the radio and on records, but it is not analyzed here because its audience is robust and young, so the issue of the media substitution of radio for live performance among older cohorts is not a major issue.

Table 6.1

Video Media Consumption Over Time

Classical Music

YR Cohort	Unadj.	Adj.	#	1	2	3	4	5	6	7	8	9	10	11	12
92 lt 16	28.1	36.4	1	.	.3545	.2174	.8055	.7244	.7050	.0003	.0001	.0001	.0001	.0001	.0001
82 lt 16	23.3	34.1	2	.0603	.	.0240	.2525	.4712	.1894	.0115	.0002	.0001	.0001	.0001	.0001
92 16-25	34.3	39.1	3	.0031	.0001	.	.3864	.0434	.4449	.0001	.0001	.0001	.0001	.0001	.0001
82 16-25	32.4	37.1	4	.1005	.0008	.4006	.	.5304	.8992	.0001	.0001	.0001	.0001	.0001	.0001
92 26-35	35.2	35.7	5	.0005	.0001	.5964	.2109	.	.4108	.0001	.0001	.0001	.0001	.0001	.0001
82 26-35	34.4	37.4	6	.0104	.0001	.9651	.4405	.7082	.	.0001	.0001	.0001	.0001	.0001	.0001
92 36-45	30.9	28.6	7	.1562	.0003	.0351	.5165	.0051	.0902	.	.0488	.0001	.0024	.0001	.0001
82 36-45	24.6	24.4	8	.1702	.6182	.0001	.0040	.0001	.0001	.0028	.	.4636	.4396	.0031	.0001
92 46-55	28.0	22.9	9	.9708	.0223	.0001	.0429	.0001	.0012	.0319	.0963	.	.8694	.0003	.0001
82 46-55	25.1	22.6	10	.1982	.4630	.0001	.0037	.0001	.0001	.0018	.8442	.1020	.	.0158	.0007
92 56-65	22.3	18.4	11	.0024	.5970	.0001	.0001	.0001	.0001	.0001	.2390	.0001	.1056	.	.0944
82 56-65	15.7	15.4	12	.0001	.0014	.0001	.0001	.0001	.0001	.0001	.0002	.0001	.0001	.0001	.

Opera

YR Cohort	Unadj.	Adj.	#	1	2	3	4	5	6	7	8	9	10	11	12
92 lt 16	16.5	20.7	1	.	.4986	.0924	.6920	.0238	.9588	.0002	.0161	.0001	.0001	.0001	.0001
82 lt 16	13.6	19.4	2	.1153	.	.3839	.8028	.1500	.5335	.0045	.0700	.0001	.0001	.0001	.0001
92 16-25	15.5	17.9	3	.5192	.2402	.	.2658	.4714	.1128	.0105	.2259	.0001	.0001	.0001	.0001
82 16-25	17.1	19.9	4	.7934	.0847	.3784	.	.0913	.7187	.0020	.0404	.0001	.0001	.0001	.0001
92 26-35	16.7	17.0	5	.9360	.0553	.3588	.8185	.	.0254	.0458	.4782	.0001	.0001	.0001	.0001
82 26-35	18.2	20.6	6	.3628	.0152	.0951	.5553	.3209	.	.0002	.0111	.0001	.0001	.0001	.0001
92 36-45	15.9	14.6	7	.6806	.1379	.7396	.4976	.5163	.1355	.	.4697	.0001	.0001	.0001	.0001
82 36-45	15.5	15.8	8	.5867	.3157	.9999	.4460	.4757	.1565	.7986	.	.0001	.0001	.0001	.0001
92 46-55	12.3	9.9	9	.0038	.4297	.0053	.0037	.0001	.0001	.0005	.0375	.	.1416	.0013	.0004
82 46-55	9.2	7.8	10	.0001	.0172	.0001	.0001	.0001	.0001	.0001	.0005	.0203	.	.4473	.0837
92 56-65	9.1	6.8	11	.0001	.0035	.0001	.0001	.0001	.0001	.0001	.0001	.0004	.9182	.	.1809
82 56-65	5.7	5.0	12	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0292	.0085	.

Table 6.2

Video Media Consumption Over Time

Ballet

YR Cohort	Unadj.	Adj.	#	1	2	3	4	5	6	7	8	9	10	11	12
92 lt 16	19.8	24.6	1	.	.4620	.8978	.3189	.6118	.6368	.0879	.0167	.0005	.0001	.0001	.0001
82 lt 16	16.3	23.0	2	.1265	.	.4766	.7604	.1783	.8020	.4015	.0815	.0100	.0003	.0001	.0001
92 16-25	22.3	24.4	3	.1734	.0024	.	.3060	.4201	.6691	.0428	.0078	.0001	.0001	.0001	.0001
82 16-25	19.0	22.2	4	.7386	.2689	.1059	.	.0963	.5756	.6385	.1537	.0287	.0010	.0001	.0001
92 26-35	24.9	25.6	5	.0048	.0001	.0822	.0033	.	.2737	.0020	.0006	.0001	.0001	.0001	.0001
82 26-35	20.7	23.5	6	.6795	.0571	.3904	.4751	.0236	.	.2318	.0370	.0021	.0001	.0001	.0001
92 36-45	22.2	21.3	7	.1711	.0018	.9349	.1035	.0475	.4017	.	.2094	.0076	.0003	.0001	.0001
82 36-45	18.4	18.9	8	.5566	.3601	.0483	.8220	.0007	.3275	.0445	.	.5996	.0555	.0129	.0001
92 46-55	20.8	17.9	9	.5433	.0138	.2588	.3421	.0012	.9395	.2460	.1914	.	.0642	.0012	.0001
82 46-55	16.5	14.9	10	.1192	.9173	.0010	.2750	.0001	.0497	.0007	.3745	.0072	.	.7027	.0333
92 56-65	17.3	14.2	11	.1560	.5707	.0002	.3896	.0001	.0573	.0001	.5395	.0013	.6093	.	.0272
82 56-65	11.8	10.7	12	.0001	.0320	.0001	.0011	.0001	.0001	.0001	.0016	.0001	.0131	.0003	.

Musicals

YR Cohort	Unadj.	Adj.	#	1	2	3	4	5	6	7	8	9	10	11	12
92 lt 16	18.1	23.0	1	.	.0660	.8689	.3736	.4134	.0158	.0054	.3291	.0001	.1115	.0001	.0186
82 lt 16	19.5	27.1	2	.5297	.	.0536	.3857	.0035	.5249	.0001	.0053	.0001	.0005	.0001	.0001
92 16-25	21.6	23.3	3	.0571	.2717	.	.3861	.2124	.0077	.0002	.1967	.0001	.0405	.0001	.0030
82 16-25	21.3	25.1	4	.1685	.4551	.8559	.	.0671	.1294	.0002	.0574	.0001	.0102	.0001	.0009
92 26-35	21.6	21.4	5	.0514	.2642	.9850	.8629	.	.0002	.0059	.7008	.0001	.2604	.0001	.0386
82 26-35	25.7	28.5	6	.0005	.0061	.0338	.0589	.0277	.	.0001	.0003	.0001	.0001	.0001	.0001
92 36-45	19.6	17.7	7	.3907	.9475	.1540	.3997	.1372	.0008	.	.1086	.0150	.3171	.0001	.9327
82 36-45	19.9	20.7	8	.4119	.8556	.3718	.5653	.3656	.0100	.8742	.	.0008	.5333	.0001	.1694
92 46-55	18.8	14.6	9	.6857	.6938	.0320	.1910	.0236	.0001	.4875	.5283	.	.0032	.0063	.0486
82 46-55	20.4	19.4	10	.2486	.6538	.4903	.7075	.4846	.0114	.6136	.7997	.2881	.	.0001	.3984
92 56-65	14.4	11.6	11	.0271	.0041	.0001	.0003	.0001	.0001	.0001	.0017	.0001	.0001	.	.0001
82 56-65	17.7	17.8	12	.8373	.3881	.0207	.1005	.0171	.0001	.2298	.2852	.4722	.1455	.0288	.

Table 6.3

Video Media Consumption Over Time

Jazz

YR Cohort	Unadj.	Adj.	#	1	2	3	4	5	6	7	8	9	10	11	12
92 lt 16	11.5	17.7	1	.	.6353	.0213	.0727	.0129	.1620	.0130	.7160	.0194	.2447	.3092	.8766
82 lt 16	8.9	16.6	2	.2604	.	.0053	.0222	.0028	.0567	.0028	.9304	.0043	.0934	.1226	.5181
92 16-25	19.2	22.3	3	.0001	.0001	.	.9309	.8288	.5394	.8122	.0095	.9869	.3476	.1044	.0286
82 16-25	17.8	22.1	4	.0085	.0003	.5049	.	.8009	.6512	.7871	.0279	.9172	.4656	.2519	.0769
92 26-35	21.9	22.6	5	.0001	.0001	.0763	.0468	.	.4152	.9824	.0039	.8199	.2408	.0430	.0124
82 26-35	18.8	21.0	6	.0013	.0001	.8253	.6869	.1031	.	.3965	.0636	.4948	.7775	.4968	.1681
92 36-45	24.0	22.6	7	.0001	.0001	.0010	.0021	.1226	.0051	.	.0030	.7905	.2201	.0310	.0099
82 36-45	15.5	16.8	8	.0773	.0051	.0702	.3625	.0012	.1685	.0001	.	.0035	.0916	.1236	.5681
92 46-55	25.2	22.3	9	.0001	.0001	.0001	.0002	.0103	.0004	.3448	.0001	.	.2632	.0263	.0111
82 46-55	21.5	20.4	10	.0001	.0001	.2015	.1034	.8223	.2029	.1344	.0065	.0218	.	.6761	.2305
92 56-65	23.2	19.7	11	.0001	.0001	.0029	.0051	.2876	.0125	.5078	.0001	.0722	.2760	.	.2990
82 56-65	20.2	18.0	12	.0001	.0001	.5833	.2909	.3143	.5076	.0203	.0325	.0015	.4988	.0499	.

Plays

YR Cohort	Unadj.	Adj.	#	1	2	3	4	5	6	7	8	9	10	11	12
92 lt 16	15.9	21.5	1	.	.0026	.0233	.0024	.2401	.0001	.7432	.0829	.0072	.0243	.0001	.4342
82 lt 16	20.3	28.5	2	.0564	.	.2262	.8537	.0208	.0076	.0002	.2525	.0001	.4517	.0001	.0213
92 16-25	22.9	26.0	3	.0003	.2067	.	.1722	.1606	.0001	.0009	.9002	.0001	.7029	.0001	.1580
82 16-25	25.0	29.0	4	.0001	.0554	.3090	.	.0138	.0142	.0001	.1861	.0001	.3463	.0001	.0136
92 26-35	23.4	23.8	5	.0001	.1240	.7569	.4144	.	.0001	.0367	.3386	.0001	.1155	.0001	.7699
82 26-35	31.9	34.8	6	.0001	.0001	.0001	.0049	.0001	.	.0001	.0001	.0001	.0002	.0001	.0001
92 36-45	22.7	20.9	7	.0002	.2182	.9038	.2504	.6417	.0001	.	.0125	.0003	.0011	.0001	.1698
82 36-45	25.0	25.8	8	.0001	.0510	.3045	.9705	.4144	.0030	.2421	.	.0001	.6341	.0001	.2598
92 46-55	20.1	16.2	9	.0189	.8915	.0417	.0115	.0114	.0001	.0338	.0083	.	.0001	.0003	.0001
82 46-55	28.1	26.8	10	.0001	.0004	.0040	.1845	.0067	.0785	.0016	.1529	.0001	.	.0001	.0778
92 56-65	15.1	12.0	11	.6462	.0049	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.	.0001
82 56-65	24.3	23.3	12	.0001	.0684	.4304	.7373	.5871	.0004	.3442	.7572	.0080	.0540	.0001	.

Visual Arts

YR Cohort	Unadj.	Adj.	#	1	2	3	4	5	6	7	8	9	10	11	12
92 lt 16	19.4	25.9	1	.	.7944	.0034	.2695	.0007	.2140	.0009	.7738	.0053	.3613	.0454	.0177
82 lt 16	16.2	25.2	2	.2082	.	.0016	.1689	.0003	.1253	.0004	.9669	.0023	.5018	.0233	.0324
92 16-25	28.4	32.5	3	.0001	.0001	.	.1455	.5753	.1597	.6217	.0020	.8246	.0001	.2473	.0001
82 16-25	24.8	29.0	4	.0452	.0018	.1369	.	.0548	.9146	.0590	.1564	.1701	.0350	.5288	.0004
92 26-35	32.9	33.5	5	.0001	.0001	.0076	.0005	.	.0550	.9392	.0002	.3776	.0001	.0592	.0001
82 26-35	26.3	29.3	6	.0066	.0001	.3615	.5767	.0023	.	.0572	.1074	.1758	.0181	.5827	.0001
92 36-45	36.4	33.3	7	.0001	.0001	.0001	.0001	.0251	.0001	.	.0002	.3943	.0001	.0561	.0001
82 36-45	24.4	25.1	8	.0552	.0021	.0780	.8739	.0001	.4542	.0001	.	.0010	.5039	.0132	.0305
92 46-55	36.1	32.1	9	.0001	.0001	.0001	.0001	.0292	.0001	.8129	.0001	.	.0001	.2014	.0001
82 46-55	25.2	23.5	10	.0152	.0003	.1175	.8831	.0001	.6360	.0001	.7396	.0001	.	.0002	.0950
92 56-65	33.4	30.4	11	.0001	.0001	.0009	.0001	.7366	.0004	.0262	.0001	.0288	.0001	.	.0001
82 56-65	20.9	19.8	12	.5266	.0522	.0002	.1261	.0001	.0236	.0001	.1550	.0001	.0534	.0001	.

Table 6.4

Radio Consumption of Classical Music and Opera Over Time

Classical Music on Radio

YR Cohort	Unadj.	Adj.	#	1	2	3	4	5	6	7	8	9	10	11	12
92 lt 16	21.4	31.1	1	.	.3096	.1111	.1029	.0117	.1018	.1532	.0023	.7417	.0001	.0069	.0001
82 lt 16	16.1	28.6	2	.0371	.	.0068	.4970	.0003	.5088	.0101	.0330	.3920	.0002	.1343	.0001
92 16-25	27.7	34.6	3	.0029	.0001	.	.0008	.2452	.0005	.8346	.0001	.0118	.0001	.0001	.0001
82 16-25	21.0	26.8	4	.8811	.0712	.0040	.	.0001	.9675	.0009	.1495	.0976	.0025	.4927	.0001
92 26-35	34.6	36.5	5	.0001	.0001	.0001	.0001	.	.0001	.1333	.0001	.0001	.0001	.0001	.0001
82 26-35	23.2	26.9	6	.4685	.0060	.0379	.4104	.0001	.	.0004	.1180	.0814	.0011	.4290	.0001
92 36-45	36.8	34.2	7	.0001	.0001	.0001	.0001	.1501	.0001	.	.0001	.0069	.0001	.0001	.0001
82 36-45	23.2	23.1	8	.4761	.0067	.0409	.4173	.0001	.9977	.0001	.	.0003	.1063	.2802	.0001
92 46-55	36.1	30.4	9	.0001	.0001	.0001	.0001	.3086	.0001	.5806	.0001	.	.0001	.0001	.0001
82 46-55	23.0	19.4	10	.4901	.0044	.0172	.4274	.0001	.9317	.0001	.9351	.0001	.	.0008	.0001
92 56-65	30.2	25.3	11	.0001	.0001	.1060	.0001	.0015	.0004	.0001	.0006	.0001	.0001	.	.0001
82 56-65	14.0	11.2	12	.0013	.3856	.0001	.0051	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.

Opera on Radio

YR Cohort	Unadj.	Adj.	#	1	2	3	4	5	6	7	8	9	10	11	12
92 lt 16	8.8	13.3	1	.	.4679	.8759	.0370	.5359	.9880	.2175	.0001	.0001	.0001	.0001	.0001
82 lt 16	7.8	12.1	2	.5125	.	.5005	.1549	.1490	.4598	.7035	.0002	.0001	.0001	.0001	.0001
92 16-25	11.5	13.1	3	.0502	.0091	.	.0247	.3257	.8649	.1671	.0001	.0001	.0001	.0001	.0001
82 16-25	7.7	9.7	4	.4906	.9556	.0106	.	.0023	.0289	.1957	.0247	.0358	.0035	.0002	.0001
92 26-35	14.2	14.2	5	.0001	.0001	.0122	.0001	.	.5424	.0098	.0001	.0001	.0001	.0001	.0001
82 26-35	11.8	13.3	6	.0633	.0149	.8323	.0160	.0778	.	.1922	.0001	.0001	.0001	.0001	.0001
92 36-45	12.4	11.6	7	.0053	.0006	.3648	.0009	.0756	.6274	.	.0001	.0001	.0001	.0001	.0001
82 36-45	5.8	5.9	8	.0598	.2367	.0001	.2766	.0001	.0003	.0001	.	.5368	.5448	.2374	.0601
92 46-55	8.9	6.7	9	.9207	.3668	.0090	.3551	.0001	.0266	.0001	.0154	.	.1434	.0032	.0016
82 46-55	6.4	5.0	10	.1019	.3768	.0001	.4298	.0001	.0004	.0001	.6913	.0253	.	.5623	.1542
92 56-65	5.9	4.3	11	.0186	.1606	.0001	.2086	.0001	.0001	.0001	.9045	.0001	.6850	.	.2503
82 56-65	4.4	3.0	12	.0024	.0264	.0001	.0383	.0001	.0001	.0001	.3514	.0001	.1426	.1534	.

Table 6.5

Consumption of Classical Music and Opera Recordings Over Time

Classical Music Recordings

YR Cohort	Unadj.	Adj.	#	1	2	3	4	5	6	7	8	9	10	11	12
92 lt 16	11.3	20.9	1	.	.0360	.0145	.0006	.0130	.0034	.1011	.1410	.3230	.5431	.5511	.0344
82 lt 16	14.0	25.9	2	.2726	.	.9875	.1424	.9702	.3590	.4295	.5934	.1431	.1276	.0027	.0001
92 16-25	20.1	25.9	3	.0001	.0040	.	.1030	.9781	.3042	.2982	.5366	.0535	.0779	.0001	.0001
82 16-25	24.7	29.5	4	.0001	.0001	.0376	.	.0965	.5555	.0125	.0456	.0014	.0023	.0001	.0001
92 26-35	24.8	26.0	5	.0001	.0001	.0033	.9631	.	.2921	.2437	.5031	.0300	.0588	.0001	.0001
82 26-35	25.3	28.1	6	.0001	.0001	.0118	.8067	.7966	.	.0511	.1343	.0068	.0094	.0001	.0001
92 36-45	26.9	24.3	7	.0001	.0001	.0001	.3113	.1628	.4387	.	.8689	.3066	.3030	.0009	.0001
82 36-45	25.3	24.6	8	.0001	.0001	.0144	.8300	.8264	.9769	.4254	.	.3781	.3042	.0109	.0001
92 46-55	28.1	22.9	9	.0001	.0001	.0001	.1014	.0170	.1487	.3520	.1455	.	.7496	.0066	.0001
82 46-55	25.8	22.4	10	.0001	.0001	.0024	.6318	.5678	.8168	.5705	.7951	.1893	.	.1077	.0014
92 56-65	23.3	19.7	11	.0001	.0001	.0240	.4982	.2697	.2882	.0058	.3141	.0001	.1319	.	.0237
82 56-65	17.9	16.0	12	.0029	.0864	.2343	.0038	.0001	.0008	.0001	.0011	.0001	.0001	.0009	.

Opera on Recordings

YR Cohort	Unadj.	Adj.	#	1	2	3	4	5	6	7	8	9	10	11	12
92 lt 16	4.9	8.7	1	.	.0533	.8241	.0079	.1117	.0050	.7305	.5843	.0207	.0031	.0002	.0002
82 lt 16	7.2	11.7	2	.1297	.	.0471	.3978	.5116	.3410	.0102	.1848	.0001	.0001	.0001	.0001
92 16-25	7.4	9.0	3	.0491	.8649	.	.0045	.0837	.0021	.4673	.6705	.0010	.0002	.0001	.0001
82 16-25	11.0	13.0	4	.0001	.0181	.0102	.	.1064	.9392	.0004	.0306	.0001	.0001	.0001	.0001
92 26-35	11.0	10.8	5	.0001	.0035	.0004	.9792	.	.0698	.0071	.3623	.0001	.0001	.0001	.0001
82 26-35	11.7	13.1	6	.0001	.0032	.0010	.6616	.5626	.	.0001	.0180	.0001	.0001	.0001	.0001
92 36-45	9.7	8.3	7	.0001	.0488	.0200	.3243	.1654	.1036	.	.2991	.0028	.0006	.0001	.0001
82 36-45	9.8	9.6	8	.0013	.0975	.0765	.4382	.3462	.2030	.9550	.	.0016	.0001	.0001	.0001
92 46-55	7.9	5.7	9	.0118	.5955	.6450	.0144	.0003	.0012	.0245	.1135	.	.1612	.0127	.0203
82 46-55	5.3	4.2	10	.7959	.1769	.0680	.0001	.0001	.0001	.0001	.0016	.0149	.	.7349	.4361
92 56-65	5.3	3.8	11	.7521	.1099	.0163	.0001	.0001	.0001	.0001	.0002	.0004	.9961	.	.5459
82 56-65	3.5	3.2	12	.3148	.0096	.0008	.0001	.0001	.0001	.0001	.0001	.0001	.1755	.0889	.

BEST COPY AVAILABLE

Effects of Life Course Influences on Arts Participation

Often when people speak of the influence of age on arts participation, what they really are talking about are life course influences -- most prominently, transitions into marriage and parenthood and later the end of active parenting and the death of the spouse -- because these changes affect how often individuals are able to attend artistic performances. Yet, these transitions will likely have variable influences on participation depending on the age at which they occur. For example, younger respondents with children in the home will likely have to forego attendance at art performances, while older respondents with children in the home may not be so constrained because they have access to other resources (experience raising children, older children who act as babysitters, money to pay for babysitters, and a larger network of friends, etc) which help them cope with children without significantly altering their arts attendance.

In this section we examine the influence of life course factors on arts participation using ordinary least squares regression models. We first created a summary scale of participation in the performing arts--classical music, ballet, opera, musicals, and theatrical plays. The range of the arts participation thus formed is from 0 to 5, and a one-point increase in the scale means that one more art form has been attended during the year.

Second, since the effects of life course factors on arts participation are hypothesized to vary by age, we split the sample into three groups: 1) age 17-46 [including all those born since World War Two]; 2) age 47-66 [working mid-life]; and 3) 67 and over [those of retirement age]. The age groups thus formed are uneven in size, but the span of years each covers corresponds with

a life stage that is likely to be of consequence for arts participation. The young group is of prime age for childrearing, marriage, and divorce. The middle group is experiencing fewer transitions, and is much less likely to have young children in the household. Childrearing is not a factor for the oldest group, but widowhood is much more common.

Third, we estimate regression models separately for each age group with controls for race, gender, age (within the age group), city size, income, education, and year of the survey. After considering the impact of these demographic factors on participation in the discussion below, we focus on how life course factors influence participation by focusing on marital status, and the presence of young children in the household.

Life Course Influences on Arts Participation: 17-46 Year Olds

Table 7.1 presents the parameter estimates from the OLS regression model of participation for the youngest age group. The parameter estimates indicate the influence of a one-unit change of an independent variable (the demographic and life course predictors) on the participation scale.[1] In these multiple regression models the coefficients represent the effects of independent variables on arts attendance controlling for the influence of all other variables in the model. This allows us to identify the unique influence of a specific life course variable on participation with the effects of demographic composition and other life course factors removed.

In this young age group, the predictors of participation explain roughly 17% of the variance in arts participation. Examining the demographic predictors of participation shown in Table 7.1 we find that blacks and non-whites are significantly lower on the participation scale when compared to their

white counterparts. Females have significantly higher arts participation scores than males. Respondents from the two younger age groups in this age bracket are significantly less frequent attenders of art performances than are the 37-46 year olds. Individuals from larger cities attend arts performances significantly more often, controlling for other factors. And finally, overall participation was down significantly in 1992 when controls for other influences are taken into account.

Looking at the two social status measures, we find that education and income each have strong significant positive influences on arts participation. Since education is years of schooling completed, this means that the expected difference between a high school graduate and a college graduate (4 years) is nearly one and a half art forms. The influence of income on participation is not nearly as strong but is still significant and positive independent of the effects of education and other factors.

The omitted category for marital status is "never married", hence all coefficients shown reflect differences from this group. We find that married respondents are significantly lower in their arts participation compared to those who never married, even when controls for other influences are taken into account. Divorced respondents are also significantly lower in their participation compared to those never married. However, a comparison between divorced and married respondents reveals that divorced respondents have significantly higher arts participation scores than married respondents. Widowed respondents are not significantly different from any other group, in part because there are so few widows in this young group aged 17 to 46.

Finally, we find that having children under 5 years of age in the home significantly decreases arts participation, net of the other variables in the

model. In contrast, children 6-11 do not have an impact on their parents' art participation. Our results clearly show that the negative impact of children on participation is confined to younger children.

Life Course Influences on Arts Participation: 47-66 Year Olds

Table 7.2 presents the regression model for arts participation in the 47-66 age group. In this model 57-66 year olds are the omitted category for age, and are compared to 47-56 year olds. The demographic and life course variables included in the model account for 21% of the variance in arts participation.

Looking at demographic predictors of arts participation, it becomes clear that this age group differs from their younger counterparts discussed above. While younger African Americans have significantly lower arts participation than whites, African Americans in the 47-66 age group are indistinguishable from whites. Other non-whites are still significantly lower than whites in their arts participation scores. As before, females have higher arts attendance scores than males. The effects of age and city size are not significant. As was the case with the younger age group, participation was significantly lower in 1992 than a decade earlier, when all the other variables are taken into account.

Both education and income have strong positive effects on arts attendance. The magnitude of the effect of education on participation is nearly the same as it was in the young age group. Individuals with high incomes have significantly higher arts participation scores, and income is a more important predictor of arts participation in this age group than it was in the younger group.

Turning to the life course factors, we find that married respondents once again score significantly lower in arts participation compared to those who never married. Divorced respondents in this cohort are identical to respondents who never married, which contrasts with the significant difference found in the younger age group. The parameter estimate indicates that divorced respondents are actually higher on the art participation scale than those never married, though the coefficient is not statistically significant. A comparison of coefficients finds that the divorced respondents have significantly higher arts participation than married respondents. Widows do not significantly differ from any of the other groups. In this middle age group, all of whom are above age 46, the effect of children on participation is inconsequential.

Overall, the effect of life course factors on arts participation is found to be lower in this age group. Marital status differences are less consequential than in the younger age group, and the difference between married and never married respondents declined. Respondents who are divorced in mid-life are found to have relatively high scores on the art attendance scale. Finally, the lack of a significant effect of children on participation makes life course factors less influential in predicting arts attendance. The equation for middle age respondents explains more of the variance in the participation scale than does the equation for younger respondents, because education and income are more important for predicting attendance for middle aged persons.

Life Course Influences on Arts Participation: Age 67 and Up

Table 7.3 presents the OLS regression model for respondents 67 and over. Those over 76 are the comparison category for the age variable. This set of independent variables explains about 16% of the variance in the arts participation scale, which is somewhat less than was explained for the other age groups.

Unlike the other age groups, there is no significant impact of survey year on participation scores once other factors are taken into account. Also unlike the other age groups, there are no significant race differences on the arts scale in the oldest group. As in the other age groups, women are significantly more active than men. Finally the influence of aging is clearly evident, with the younger group being substantially higher on the arts participation index compared to the oldest respondents. This is not surprising since, as we have seen in earlier chapters, there is a marked decline in arts participation among the most elderly. City size has a significant impact on participation with those from larger cities having higher scores.

In this older age group, both education and income have a significant positive impact on arts attendance scores, however their impact is clearly weaker than it was in the middle age group. While the effect of income on participation is substantially weaker among the oldest respondents compared to the middle age group, it is still higher than it was in the youngest age group.

None of the life course variables have a significant impact on arts participation scores in this age group. Most surprisingly widowhood, common among those in this age group, does not adversely affect arts attendance. The major change from the middle age group is that married respondents have "caught up" in their participation relative to those who never married or were

divorced. This could result from declining participation from the never married, and it is possible that older couples are able to sustain activity better than those who live alone. That these life course factors do not significantly predict participation for older Americans gives support to the theory that aging is the cause of lower rates of participation among the elderly -- rather than widowhood.

Notes to Chapter 7

1. Standardized estimates are interpreted as effects of a standard deviation change in an independent variable on the participation scale, measured in terms of standard deviation increases or decreases in the dependent variable (the participation scale). Because of the requirements of the regression statistic, the independent variables which represent categories are compared to an omitted category, for instance females are compared to males, blacks and non-whites are compared to anglos, 17-26 year olds, and 27-36 year olds are compared to 37-46 year olds.

Table 7.1

OLS Regression of the Influence of Life Course Factors on Arts Participation: 18-46 Year Olds

	Parameter Estimate	Standardized Estimate	Significance
Black	-.161	-.052	.0001
Non-White	-.201	-.038	.0001
Female	.192	.100	.0001
Age 17-26	-.216	-.105	.0001
Age 27-36	-.121	-.061	.0001
City Size	.005	.055	.0001
Survey Year (1992)	-.016	-.084	.0001
Education	.359	.352	.0001
Income	.056	.057	.0001
Married	-.213	-.111	.0001
Divorced	-.109	-.033	.0001
Widowed	-.097	-.007	.2975
Children < 5	-.033	-.024	.0023
Children 6-11	.005	.004	.6431
Intercept	2.033		
R^2	.167		

Table 7.2

OLS Regression of the Influence of Life Course Factors on Arts Participation: 47-66 Year Olds

	Parameter Estimate	Standardized Estimate	Significance
Black	-.033	-.009	.3690
Non-White	-.331	-.043	.0001
Female	.221	.109	.0001
Age 47-56	-.038	-.019	.0715
City Size	.001	.014	.2025
Survey Year (1992)	-.007	-.032	.0040
Education	.364	.355	.0001
Income	.202	.192	.0001
Married	-.172	-.074	.0001
Divorced	.050	.016	.3154
Widowed	.023	.006	.6710
Children < 5	-.083	-.011	.2706
Children 6-11	-.028	-.007	.4995
Intercept	1.186		
R^2	.213		

CHAPTER 8 January 20, 1995

Cohort Differences and Shifts in Highbrow and Omnivorous Tastes

In the previous chapters, we have discussed age influences and cohort variations in participation in various art forms either through live attendance or via the media. In this final chapter we turn from the focus on arts *participation* to focus on *tastes* for art music. In his case study of Boston, Paul DiMaggio (1982) has shown that the clear distinction between fine art and popular culture developed in the final decades of the nineteenth century, and in his careful study of the presentation of Shakespeare on the American stage over the past two centuries, Lawrence Levine (1988) has shown the crystallization of what he calls the highbrow/lowbrow distinction.

Their finding is that persons with highbrow tastes were expected to shun popular forms of entertainment, and art music has often been marketed on this belief for its "snob" value. However, there have been numerous indications of changing tastes, and in a recent study, Peterson and Simkus (1992) have shown that persons with highbrow music tastes also say they like many kinds of popular music and engage in many popular forms of leisure more often than those who do not have highbrow tastes.

We examine age differences in preferences for "highbrow" music forms and for a wide range of popular music forms -- what we call omnivorous taste. Our measure of omnivorous preferences tallies the number of the following twelve types of music preferred by a respondent: classical music; opera; musicals; jazz; blues; big band; country; bluegrass; mood music; gospel; rock and roll; and, folk.[1] In order to trace age differences and possible aging influences on highbrow and omnivorous choices, we begin by examining cohort differences

in their taste for highbrow music (measured here as liking both classical music and opera), the number of music forms liked (our measure of omnivorous taste), and the number of music forms chosen by those with highbrow tastes.

To ensure that cohort variations are not a function of the demographic composition or life course experiences of cohorts we present the results unadjusted, controlling for demographic and life course variables, and controlling for these factors plus year of the survey, as we have done, where appropriate, in previous chapters. Next we examine changes in highbrow preferences, omnivorous preferences, and omnivorous preferences among highbrows over time.

Cohort Differences in Highbrow and Omnivorous Preferences

Table 8.1 presents the proportion in each cohort who preferred both opera and classical music (our measure of highbrow) and the mean number of musics chosen (our measure of omnivorous preference) for each cohort. Proportions and means are presented unadjusted, adjusted for demographic and life course factors, and adjusted for the year of the study as well.

Highbrow Preferences

Looking first at unadjusted differences in preferences for highbrow music forms, we find that cohorts which had high participation in opera and classical music have the highest proportions of highbrows. It is especially true for the 1926-1935 cohort, which has a significantly higher proportion of highbrows than any other cohort. This is not surprising given the findings for their arts participation noted in earlier chapters and reflects the

convergence of tastes for particular music forms and choices made about music participation.

The 1916-1925 cohort has significantly more highbrows than the pre-1916 cohort, until controls for demographic composition and life course factors are introduced. The 1916-1925 cohort also has significantly more highbrows than the 1936-1945 cohort. There is a very clear drop in the proportion of highbrows beginning with the older baby boom cohort (1946-1955). The older boomers have significantly fewer members with highbrow preferences than any previous cohort. Further, the younger boomers and the baby busters (1966--1975) have significantly fewer respondents with highbrow tastes than even the older baby boomers.

Controls for demographic composition, life course factors, and for year of the study only serve to accentuate the differences between the younger cohorts and older cohorts by augmenting the proportion of highbrows in the oldest two cohorts and deflating the proportion in the younger cohorts. Since highbrow preferences are strongly tied to education and income, and since the older cohorts are less educated this difference between the unadjusted and adjusted results is expected. Indeed, the adjusted results suggest that in the youngest cohort we would expect virtually no highbrows were it not for their high levels of education and unfettered life course condition! After statistical controls, the dividing line between age groups with numerous highbrows and those with fewer moves up to include the 1936-1945 cohort among those with fewer highbrows, though they still have more highbrows than all younger cohorts. Highbrow preferences are clearly much more prevalent in the older cohorts when demographic and life course factors are taken into account.

Omnivorous Preferences

Interestingly, Table 8.1 also shows that the 1926-1935 cohort is not only the most highbrow but also chooses the largest number of different music forms. This cohort with the highest number of highbrows is also significantly more omnivorous in their preferences compared to all other cohorts. The curvilinearity of omnivorous preferences is also evident in the unadjusted means, with the oldest cohort having the fewest types of music preferred, and the youngest having the second fewest. Both the World War II cohort (1936--1945) and the oldest baby boom cohort (1946-1955) have proportionately more omnivores than the 1916-1925 cohort in the unadjusted results.

Controls for demographic composition and life course factors and year of the study increases the variety of music forms preferred by the oldest two cohorts, and decreases the number preferred by younger cohorts. Again, educational differences between the cohorts are likely responsible for this adjustment effect, because we know from inspecting the data that more educated people tend to prefer more types of music, the higher levels of education in the younger cohorts force their adjusted means down, while adjustment has the opposite effect on the number of preferences found in the older cohorts. The 1926-1935 cohort remains the most omnivorous cohort, and it is significantly more omnivorous than all other cohorts after controls for period and demographics and life course factors (except for the 1916-1925 cohort). The controls for demographic composition and life course factors make the pre-1916 cohort indistinguishable from the baby boom cohorts. Still, the oldest cohort has fewer preferred music forms when measured against the 1916-1925, 1926--1935, and 1936-1945 cohorts. The adjusted results show that the younger baby

boomers are significantly less omnivorous in their preferences compared to the older cohorts (excluding the pre-1916 cohort).

That the middle cohorts prefer the largest number of different music forms suggests that mature audiences are attracted by variety rather than by purity. Recent fusions between classical music, opera, jazz, rock, and even country music may not receive the negative reactions forecast by music purists who decry the contamination of classical music by more popular music forms (Peterson 1992). Yet, to truly test whether or not the audience for high music forms is receptive to other music forms we must examine omnivorous preferences among the highbrows.

Omnivorous Preferences Among Highbrows

In the bottom third of Table 8.1 we present the number of kinds of music liked by the people we call highbrows. For instance, among those in the 1946-1955 cohort who like classical music and opera, the average number of other music preferences is 8.24 out of a possible 12. Because of the relatively small number of highbrows, many differences between cohorts are not significant. Indeed, only the oldest cohort is found to have significantly fewer preferences among highbrows compared to other cohorts. However as compared with the total sample the highbrows are incredibly omnivorous, choosing roughly double the number of types of music. While the oldest cohort has highbrows with more narrow tastes, even these older highbrows are far from purists, preferring nearly seven musical categories -- that is five in addition to classical music and opera. There are some purists who dislike all more popular forms of music to be sure, but they are few in number. The old

stereotype of the classical music and opera purist is clearly contradicted by these findings. Diversity in taste seems to be commonplace.

Changes in Highbrow and Omnivorous Preferences

Table 8.2 presents the unadjusted and adjusted proportions of highbrows and means on omnivorous tastes for each cohort for 1982 and 1992. Since we have already examined cohort differences on these preferences, our focus now turns to changes in the proportions of highbrows in each cohort who have omnivorous tastes.

Changes in Highbrow Preferences

What is striking in Table 8.2 is that the unadjusted results show that the proportion of highbrows increased significantly from 1982 to 1992 in every cohort with the exception of the pre-1916 cohort. This result runs counter to the pattern of lower concert going, however it confirms the findings of higher media participation (discounting the negative finding for recordings among the older cohorts). What is more, controls for demographic composition and life course factors do not change the significance of most of the findings (though the significance of the increase for the younger baby boomers falls to p=.096). Still, both baby boom cohorts doubled or nearly doubled their unadjusted and adjusted proportion of highbrows from 1982 to 1992. The increases in the proportion of highbrows in the baby boom cohorts is promising. The lack of a significant change among the pre-1916 cohort suggests that preferences may stabilize at a certain point in the life course, however increases by the 1916-1925 and younger cohorts suggest that preference crystallization occurs very late in life if at all. The increases in the

number of highbrows may signal growing interest in art music.

Changes in Omnivorous Preferences

In the middle of Table 8.2 we present the unadjusted and adjusted means for the number of musical forms preferred by members of each cohort in 1982 and 1992. As was the case with the proportions preferring highbrow music, we find that there are significant increases in the average number of musics chosen by all age groups. These increases are even more substantial than the proportional increases in the number of highbrows---hence, the increases in highbrows account for some, but do not account for most of the increase in the number of music forms liked. Looking first at the unadjusted means, only the pre-1916 cohort fails to expand the number of musical forms it prefers. With the exception of the oldest cohort, every cohort increases by at least one half the average number of types of music preferred. Put another way, more than half of the members of each cohort add another type of music to the list of those he or she likes.

Controls for the demographic composition of cohorts and life course factors do not change the pattern of relationships. All of the increases in the number of musical types chosen remain significant in the presence of statistical controls. Further, the overall magnitude of the increases is not substantially changed by controls -- half of those in each age group increased the variety of music genres chosen.

Overall increases in the number of musical forms liked puts the increase in the proportion of highbrows in each cohort into context. In part, the increase in the proportion of people who prefer high culture music is part of

an overall trend towards more diverse preferences. While some might think it good that more people prefer classical music and opera, they should not necessarily expect changes in patterns of concert going or media consumption given that loyalties are increasingly diverse. Hence, competition for scarce time and discretionary income between types of cultural goods is becoming greater.

Changes in Omnivorousness Among Highbrows

The bottom of Table 8.2 shows that the number of types of music liked by those who also like both classical music and opera is relatively unchanged between 1982 and 1992. Since the number of different types of music preferred by the highbrows is already quite high, the lack of change is not too surprising. The unadjusted figures show that only the highbrows from the 1946-1955 cohort significantly increased in the number of musical forms they choose. This increase approaches significance even after controls for demographic composition and life course variables are added(p=.089). In contrast, the pre-1916 cohort decreases the number of types of music chosen by nearly 1. This decline approaches conventional levels of significance for both the unadjusted (p=.068) and the adjusted (p=.102) results.

The findings reported in this chapter clearly refute the idea that art-music lovers disdain popular music. Highbrows of all cohorts tend to like more kinds of music than do their lowbrow cohort peers. Finally, each cohort is more omnivorous in 1992 than it was in 1982. The cohorts born after 1926 are more omnivorous in their tastes than those born in 1925 or before.[1]

These findings suggest that it might be advantageous to market classical music and opera as part of a broader aesthetic experience rather than as clearly distinct from and better than other forms.

Notes for Chapter 8.

1. These twelve types of music are the only ones that are comparable in the two surveys.

2. The degree of omnivorousness of the post World War II cohorts would probably have been greater had both surveys included several of the kinds of music most often chosen by the younger cohorts, notably rap, heavy metal, salsa, and contemporary folk, which were not included in the 1982 survey.

Table 8.1

Cohort Differences in Highbrow and Omnivorous Preferences

	Pre-1916	1916-25	1926-35	1936-45	1946-55	1956-65	1966-75
Highbrow[1]	11.1	13.5[a]	16.2[aab]	11.4[bcc]	7.1[aabbccdd]	4.8[aabbccddee]	4.0[aabbccddee]
Highbrow[2]	16.0	15.7	16.8	10.9[aabbcc]	5.6[aabbccdd]	3.2[aabbccddee]	1.1[aabbccddee]
Highbrow[3]	16.8	16.0	17.0	11.0[aabbcc]	5.6[aabbccdd]	3.1[aabbccddee]	-.4[aabbccddeeff]
Omnivore[1]	3.108	4.027[aa]	4.441[aabb]	4.232[aabc]	4.232[aabc]	3.842[aabccddee]	3.310[bbccddeeff]
Omnivore[2]	3.758	4.278[aa]	4.482[aab]	4.105[aacc]	3.969[bbcc]	3.650[bbccddee]	3.063[aabbccddeeff]
Omnivore[3]	3.865	4.316[aa]	4.504[aa]	4.114[abcc]	3.968[bbcc]	3.636[bbccddee]	2.842[aabbccddeeff]
Among Highbrows:							
Omnivore[1,4]	6.586	7.790[aa]	7.844[aa]	7.853[aa]	8.244[aa]	7.919[aa]	5.500
Omnivore[2,4]	6.886	7.882[aa]	7.836[aa]	7.807[aa]	8.063[aa]	7.848[aa]	5.284
Omnivore[3,4]	6.979	7.898[aa]	7.841[aa]	7.794[aa]	8.036[aa]	7.811[aa]	5.166

1. Unadjusted Mean 2. Adjusted for Demographics 3. Adjusted for Demographics and Period.

a = difference from pre-1916 significant at .05 level
aa = difference from pre-1916 significant at .01 level
b = difference from 1916-1925 significant at .05 level
bb = difference from 1916-1925 significant at .01 level
c = difference from 1926-1935 significant at .05 level
cc = difference from 1926-1935 significant at .01 level
d = difference from 1936-1945 significant at .05 level
dd = difference from 1936-1945 significant at .01 level
e = difference from 1946-1955 significant at .05 level
ee = difference from 1946-1955 significant at .01 level
f = difference from 1956-1965 significant at .05 level
ff = difference from 1956-1965 significant at .01 level

BEST COPY AVAILABLE

Table 8.2

Changes in Highbrow and Omnivorous Preferences: 1982-1992

Highbrow Preferences

YR Cohort	Unadj.	Adj.	#	1	2	3	4	5	6	7	8	9	10	11	12
92 lt 16	10.5	15.0	1	.	.4782	.1624	.6672	.0374	.8134	.4712	.0013	.0002	.0001	.0001	.0001
82 lt 16	11.4	16.5	2	.6600	.	.3481	.1199	.0643	.2018	.0606	.0001	.0001	.0001	.0001	.0001
92 16-25	16.1	18.0	3	.0074	.0035	.	.0182	.3943	.0346	.0065	.0001	.0001	.0001	.0001	.0001
82 16-25	11.5	14.1	4	.6126	.9295	.0046	.	.0007	.7846	.6808	.0001	.0001	.0001	.0001	.0001
92 26-35	19.9	19.4	5	.0001	.0001	.0217	.0001	.	.0015	.0001	.0001	.0001	.0001	.0001	.0001
82 26-35	13.0	14.5	6	.2058	.2718	.0535	.3130	.0001	.	.4905	.0001	.0001	.0001	.0001	.0001
92 36-45	14.5	13.5	7	.0432	.0346	.3216	.0431	.0004	.3042	.	.0003	.0001	.0001	.0001	.0001
82 36-45	8.4	8.2	8	.2875	.0412	.0001	.0329	.0001	.0013	.0001	.	.4501	.0002	.0014	.0001
92 46-55	9.5	7.2	9	.6073	.1740	.0001	.1451	.0001	.0092	.0002	.3945	.	.0022	.0067	.0001
82 46-55	4.7	3.4	10	.0022	.0001	.0001	.0001	.0001	.0001	.0001	.0043	.0001	.	.6622	.2237
92 56-65	6.3	3.9	11	.0240	.0001	.0001	.0001	.0001	.0001	.0001	.0917	.0053	.1774	.	.0962
82 56-65	3.2	1.9	12	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.2094	.0082	.

Omnivorous Preferences

YR Cohort	Unadj.	Adj.	#	1	2	3	4	5	6	7	8	9	10	11	12
92 lt 16	2.986	3.567	1	.	.1624	.0001	.0141	.0001	.0004	.0001	.2710	.0006	.5098	.1391	.3907
82 lt 16	3.155	3.830	2	.3764	.	.0001	.1337	.0001	.0023	.0001	.7346	.0058	.3304	.8829	.0019
92 16-25	4.369	4.612	3	.0001	.0001	.	.0002	.3829	.0203	.2770	.0001	.0072	.0001	.0001	.0001
82 16-25	3.756	4.039	4	.0001	.0001	.0001	.	.0001	.1019	.0037	.0578	.1804	.0094	.1695	.0001
92 26-35	4.787	4.748	5	.0001	.0001	.0072	.0001	.	.0006	.0350	.0001	.0001	.0001	.0001	.0001
82 26-35	4.137	4.260	6	.0001	.0001	.1227	.0072	.0001	.	.1733	.0003	.7448	.0001	.0020	.0001
92 36-45	4.653	4.447	7	.0001	.0001	.0596	.0001	.3482	.0002	.	.0001	.0738	.0001	.0001	.0001
82 36-45	3.839	3.782	8	.0001	.0001	.0003	.5512	.0001	.0288	.0001	.	.0005	.4667	.5801	.0026
92 46-55	4.563	4.218	9	.0001	.0001	.1680	.0001	.0918	.0008	.4805	.0001	.	.0001	.0012	.0001
82 46-55	3.914	3.695	10	.0001	.0001	.0011	.2232	.0001	.0782	.0001	.5448	.0001	.	.1578	.0108
92 56-65	4.140	3.852	11	.0001	.0001	.0947	.0025	.0001	.9775	.0001	.0128	.0001	.0395	.	.0001
82 56-65	3.521	3.403	12	.0030	.0045	.0001	.0681	.0001	.0001	.0001	.0098	.0001	.0005	.0001	.

Omnivorous Preferences Among Highbrows

YR Cohort	Unadj.	Adj.	#	1	2	3	4	5	6	7	8	9	10	11	12
92 lt 16	5.871	6.240	1	.	.1023	.0013	.0073	.0007	.0165	.0024	.0201	.0003	.0338	.0065	.0416
82 lt 16	6.847	7.140	2	.0675	.	.0298	.1332	.0174	.2732	.0541	.2911	.0072	.4002	.1197	.4072
92 16-25	7.884	8.022	3	.0001	.0064	.	.5220	.9265	.2682	.8154	.3535	.5031	.3250	.7737	.4222
82 16-25	7.686	7.760	4	.0007	.0312	.6006	.	.4291	.6386	.6580	.7262	.1868	.6518	.7818	.7484
92 26-35	8.029	8.056	5	.0001	.0008	.6693	.3260	.	.1835	.7175	.2687	.5090	.2524	.6931	.3622
82 26-35	7.596	7.584	6	.0009	.0441	.4248	.8084	.1896	.	.3398	.9407	.0622	.9392	.4890	.9911
92 36-45	7.983	7.931	7	.0001	.0017	.7779	.4101	.8858	.2581	.	.4332	.3238	.3986	.9210	.5147
82 36-45	7.644	7.614	8	.0012	.0498	.5436	.9169	.2951	.9023	.3704	.	.0951	.8921	.5498	.9648
92 46-55	8.541	8.296	9	.0001	.0001	.0650	.0195	.1141	.0066	.0975	.0194	.	.0892	.3157	.1668
82 46-55	7.667	7.550	10	.0016	.0599	.6096	.9644	.3653	.8664	.4405	.9595	.0351	.	.4664	.9422
92 56-65	7.964	7.888	11	.0001	.0044	.8335	.4757	.8544	.3238	.9588	.4310	.1173	.4952	.	.5682
82 56-65	7.825	7.590	12	.0014	.0451	.9017	.7752	.6551	.6286	.7341	.7172	.1272	.7627	.7755	.

BEST COPY AVAILABLE

REFERENCES For Age Factors in Arts Participation

by Richard A. Peterson and Darren E. Sherkat

January 20, 1995

Balfe, Judith H.
1989 "The baby-boom generation: lost patrons, lost audience?" Pp. 9-25 in Margaret Wyszomirski and Pat Clubb (eds.) The Cost of Culture. New York: ACA Books.

Bloom, Allan
1987 The Closing of the American Mind. New York: Simon & Schuster.

DiMaggio, Paul
1982 "Cultural entrepreneurship in nineteenth-century Boston: the creation of an organizational base for high culture in America." Media, Culture, and Society 4: 4-33; 303-320.

1991 "Constructing an organizational field as a professional project: the case of art museums, 1920-1940." In Walter W. Powell and Paul DiMaggio, (eds.) The New Institutionalism in Organizational Analysis. Chicago: University of Chicago Press.

DiMaggio, Paul and Francie Ostrower
1990 "Participation in the arts by black and white Americans." Social Forces 63:753-778.

Elliot, T.S.
1948 Notes Toward the Definition of Culture.

Glenn, Norval D.
1989 "A flawed approach to solving the identification problem in he estimation of mobility effect models." Social Forces 69:789-795.

Levine, Lawrence W.
1988 Highbrow/Lowbrow: The Emergence of Cultural Hierarchy in America. Cambridge: Harvard University Press.

Mather, John
1993 "A Challenging new audience - 'baby boomers.'" Bulletin of the Association for Performing Arts Presenters. March: 3.

Peterson, Richard A.
1990 Audience and industry origins of the crisis in classical music programming." Pp. 207-227 in David B. Pankratz and Valerie B. Morris (eds.) The Future of the Arts. New York: Praeger.
1992 "The battle for classical music in the air." Pp. 271-286 in Judith H. Balfe (ed.) Paying the Piper: Causes and Consequences of Arts Patronage. Urbana, Illinois: University of Illinois Press.

_____ and Albert Simkus

1992 "How musical taste groups mark occupational status groups." Pp. 152-168 in Michele Lamont and Marcel Fournier, editors, Cultivating Differences: Symbolic Boundaries and the Making of Inequality. Chicago: University of Chicago Press.

Robinson, John
1993 Arts Participation in America: 1982-1992. Research Division Report #27, National Endowment for the Arts: Washington D.C.

Rodgers, Willard L.
1982 "Estimable functions of age, period, and cohort effects." American Sociological review 47: 774-787.